

THE  
ARCHITECT  
& BUILDING NEWS

IN THIS ISSUE

- R.I.B.A. CONFERENCE REVIEW
- RESEARCH LABORATORIES, GREENHITHE
- CURRENT MEASURED RATES

JULY 17, 1952

• VOL. 202

• NO. 4361

• ONE SHILLING WEEKLY

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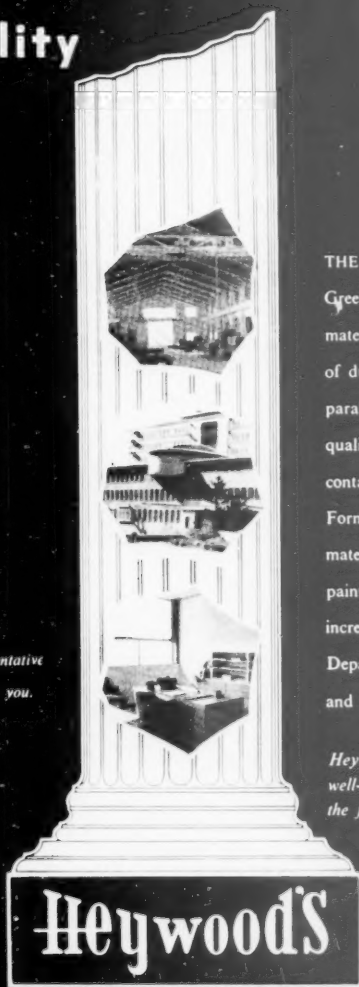
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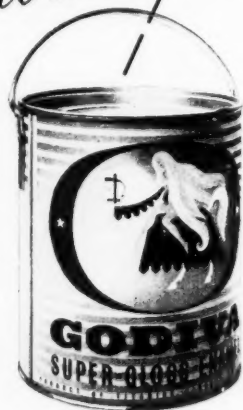
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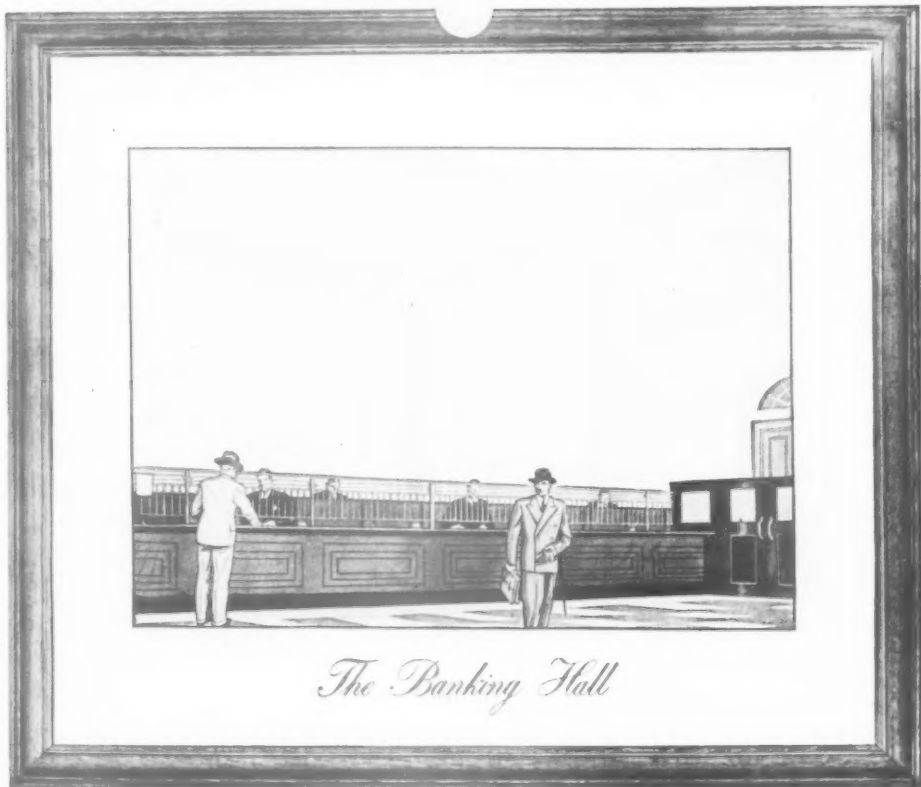
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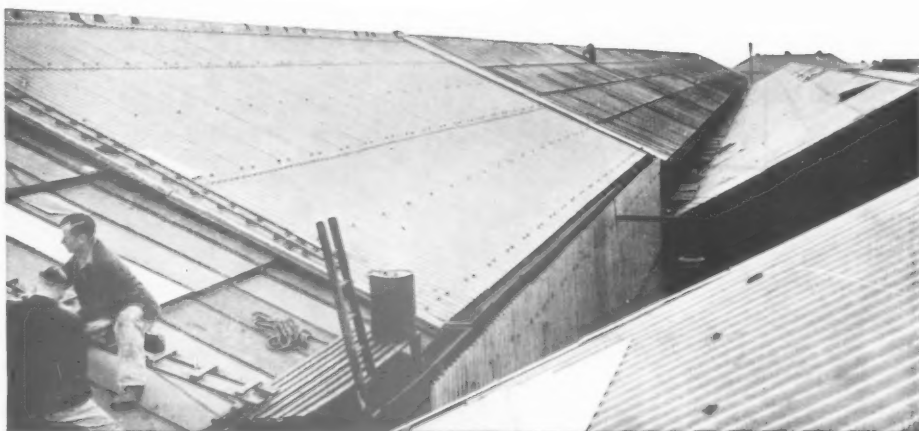
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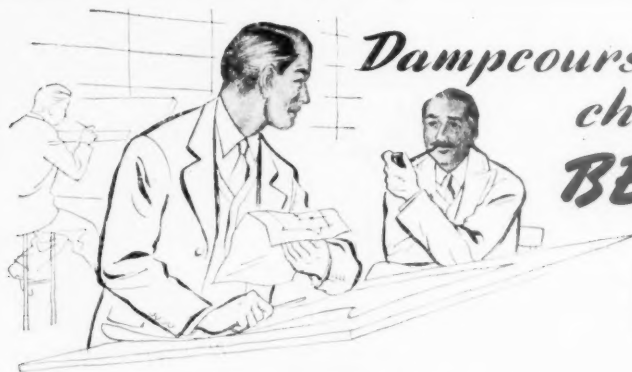
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THE  
**ARCHITECT**  
& BUILDING NEWS

July 17, 1952

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00.

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## NON-TRADITIONAL HOUSES

THE Ministry of Housing and Local Government issued, last March, to all housing authorities, Circular No. 28/52; it covered the subject of "Expansion of Housing Programme—'Non-Traditional' Houses." It was frankly admitted at the time to be a fillip for more houses in the years 1952, '53 and '54. The effects are already being seen and fears of the consequences already finding expression; this may be praiseworthy from a narrow political point of view but, it seems, may not be consistent with reasoned planning.

Let us say at once that we do not object to prefabrication where it can be proved of use from both practical and economical standpoints; the same can also be said of any manufactured article which remains under control of greater or less degree by the community for the community. As soon, however, as the article in question is marketed without reference to the welfare or comfort of the country as a whole then the situation becomes controlled by expediency and long-term plans and policies have to give way in consequence.

The danger is not the use of non-traditional materials or methods as such, but the use of these panaceas in the wrong place, in make-shift and ill-planned layouts or by people untrained to appreciate that visual appearance is an amenity that belongs to the community and a factor that cannot be ignored by any qualified physical planner.

We have noted recently that a certain local council is proposing to allocate fifty licenses for private house-building provided the Ministry of Housing and Local Government will agree that some seventy-six non-traditional houses are allowed to be erected in or near one of its small towns. What type of house it is proposed to erect we have not heard, but it is difficult to imagine a non-traditional type of house that fits naturally into Yorkshire Dale surroundings.

Incidentally, reduction of costs is not the real object of the proposed "arrangement," for each of the non-traditional houses is to cost £1,412; further, the increase in population over the whole of the area is only 9 per cent between 1931 and 1951 and the small town concerned is only a part of the area.

If prefabricated or partially prefabricated non-traditional dwellings are to be introduced into layouts that were never planned for them or are to be dumped down over large areas without adequate special planning then we do not want to see the results, even though the individual houses may be quite innocuous as demonstration units or when displayed in exhibition halls.

The architect, whether private or public, should also realize that he may well find it valuable to examine the situation from a professional point of view. For, as 28/52 is put into force with increasing momentum, it may be that his advice and experience and, what is more important, his training in visual amenity-planning for the community will be dispensed with; already local authorities and "self-help building" groups are being invited, if not urged, to communicate directly with makers and marketers of non-traditional houses, who will soon, if they are not already doing so, be prepared to contract to do layouts, get approvals and licenses and, in fact, do the architect's work. To eliminate any profession from the service of the community is to open that community to grave dangers and eventually, it may be, leave it to the tender mercies of any who may follow up a situation with any sort of racket that gives a quick return.

Another aspect of the question is concerned with the stultification of much needed research into building methods generally. Most of the non-traditional methods now in use are limited by adherence to a particular material or by insistence

on a particular method of erection. The real approach, and one which would make reductions in cost and increases in production certain, is that of scientific research into the whole subject using any or all methods and arranging for the proper distribution of components over a national field. Insistence on the limiting programme outlined in 28.52 is likely to delay such an overall approach for a considerable time.

We believe that the R.I.B.A. is already aware of the issues and the possible dangers to both community and profession, for the Council agreed at its meeting of the 6th of May to ask the Minister to receive representations. It will be interesting to learn the results of this action, if it has yet taken place, and what further action is likely to accrue. The whole matter is one which calls for very lively attention from all concerned.

## EVENTS AND COMMENTS

### THREE PRIZE DAYS—THE ROYAL COLLEGE OF ART

Prize days are not everyone's cup of tea, and although I would not like to attend one every day I enjoyed the three I went to last week. They were prize days of rather different types in institutions of widely different character but with the same underlying theme, good design. Convocation Day at the Royal College of Art is, I believe, a fairly recent event in its present form. It is as impressive as such an occasion should be in a National College. It was held in the hall of the Royal College of Music to the distant strains of persons being examined on every type of instrument and perhaps this was why on a very hot day it was not possible to have any windows open. The winners of diplomas and prizes in cap, gown and hood were drawn up in a bank behind the dais where the teaching staff, also in academic dress, sat. At the front of the dais there was a table for four, Mr. Robin Darwin, the principal, Sir Colin Anderson, chairman of Council, Sir John Maud, permanent secretary M.O.E., and Mr. R. P. Moon the Registrar. The principal made his report on the year's work and most impressive it was. He strongly stressed the point that the R.C.A. was the hope of the side as far as industrial design was concerned and that it was not playing at arts and crafts but meant business. Sir John Maud, in his address, asked for better co-operation between designers and business men and rather surprisingly had nothing good to say about art for arts sake. The part of the proceedings which I enjoyed most was the conferring of various honorary degrees or diplomas on distinguished persons. The citations were most wittily worded and I wish I could quote them more fully. Mr. Henry Moore was made an Honorary Fellow, a newly introduced honour, the principal pointing out that he was the most illustrious son of the college with a world wide reputation. It had been said that Mr. Moore had discovered the true significance of the hole and he had enabled some people to see through modern sculpture. Mr. Gordon Russell who was made an Honorary Designer of the R.C.A. was hailed for his owl-like wisdom, and Sir Hugh Casson (also Hon. Des. R.C.A.) after some affectionate words, was presented as one of the Festival Knights in a Coronation Daze. Having witnessed the presentation of some of the diplomas to graduates who came up led by the hand by their professors I could stand the heat no longer and made for the Exhibition in Imperial Institute Road. Here, too, all the windows were shut but there were fewer people. The Minister of Works was an interested visitor. He had already been mentioned by the principal as having purchased pictures by students of the R.C.A. for hanging in British Embassies. It is admirable that Mr. Eccles should be so interested in the R.C.A. and

I only hope that during his stay at the Ministry he will have time to do something about our embassy architecture and furnishing. There could surely be no finer way of stimulating exports than by having work of our best student designers displayed in the homes of Her Majesty's ambassadors throughout the world. I would like to commend to you the very high quality of the work shown in this exhibition. It comes from all the departments of the R.C.A. and well repays the effort of a journey to the wilds of South Kensington.

### THE CANTERBURY SCHOOL OF ARCHITECTURE

My second prize day was at the School of Architecture of the Canterbury College of Art. The College of Art, now a College for Further Education managed jointly by the Kent County Council and the Corporation of Canterbury, was until fairly recently a small school of art with rather arty-crafty tendencies. There is nothing arty-crafty about it under its present management. The School of Architecture has already earned a name for itself by the success of its students in R.I.B.A. and other competitions. Mr. Paine, the principal of the School of Architecture, spoke in his report of the experimentation with the first year curriculum in an effort to find the best method of grounding the budding architect. He spoke with authority and confidence of the training methods employed in the school but pointed out that in the fourth and fifth years the school could do very little but help its students satisfy the R.I.B.A. design examiners with their testimonies of study. It was not possible in these two years to give the students much play with their imaginations. I do not think that Mr. Paine meant that he wished to indulge his students with the higher flights of architectural philosophy for the whole course seemed to me to be admirably balanced between the theoretical and the practical. An innovation which I thought particularly good was a scheme for carrying out all the drawings for a project by a "firm" of students drawn from all years and working under senior students. In this way the atmosphere of an actual office was simulated and enthusiastic team work resulted.

Mr. Howard Lobb addressed the students and presented the prizes; the Mayor of Canterbury and the chairman of the Kent Education Committee also spoke.

I have nothing but praise for the exhibition of work which combined in the best way the study of lessons to be learned from the past with the imaginative use of modern methods and materials. Later I was able to see another department of the College of Art when Mr. S. Hickson took me round the studios of the Department of Graphic Design and Printing. A very high standard of work is produced here and the department recently had the distinction

of being asked by the Monotype Company to stage an exhibition of its work at the company's City office. It is hoped that the exhibition will later tour the United States. The thing that surprised me most was to hear that although the College of Art is widely known outside Canterbury the citizens seem to know very little about it and take comparatively little interest in its work. Did they but know the College could help them immensely. I found the whole visit most stimulating and this was not only due to the work I saw and the keenness of the teaching staff whom I met but also largely to the influence of the principal of the College, Mr. A. Moody, who is obviously the ideal head for such an institution.

#### THE A.A.

It was once a tradition that the first official function performed by the newly elected president of the R.I.B.A. was to present the prizes at the A.A. school. This has not been kept up for some years and it is therefore doubly to be welcomed that Mr. Howard Robertson visited the A.A. on its speech day last week. Mr. Robertson is one of the A.A.'s best known and best loved members and it is largely due to him that the A.A. stands where it does. It was interesting to compare the very able address given by Mr. Michael Patrick, the principal, with the no less able report of the principal of the Canterbury School. It was a comparison between the young and growing school with one of the established leaders in the field. The addresses had one feature in common, both were dissatisfied with present methods and both were spending time on experimentation. The young school was not prepared to follow the traditional paths of architectural education and the old established one was not satisfied with itself either. I found much to admire in Mr. Patrick's address and, indeed, I must admit it was the first time that I have ever heard the aims of modern architectural education explained in words which I could understand. Indeed, I imagine that some of the students found the words almost too simple. The exhibition of work is a *tour de force* and there is a great deal which is very good. I found, as usual, that there was far too much to take in at one visit, for some of the schemes have a prodigious number of drawings. I was particularly impressed with the work of the first year, and that of a group in the fifth year which had produced

a plan for a vertical city which makes the furthest fling of le Corbusier look pretty unimaginative. This scheme is no mere esquisse but is worked out to the last piloti and the last lift of concrete shuttering. Unfortunately the standard of draughtsmanship is not up to the imagination and skill behind the project.

Mr. Howard Robertson spoke of his long association with the A.A., which dated back to Tufton Street, in the good old days when a brick was a brick and said that there should be a law to prevent photographs being taken of new buildings before they were ten years old. His speech was precisely right for the occasion and his particularly friendly way of presenting the prizes can have failed to impress only the hopelessly hard boiled. All the speakers referred to the A.A.'s relations with the R.I.B.A. and wished for closer co-operation. While I think this is an excellent idea I would not like to see the A.A. giving up its peculiarly independent attitude to Portland Place, which seems to me to provide something which even the R.I.B.A. would be sorry to lose.

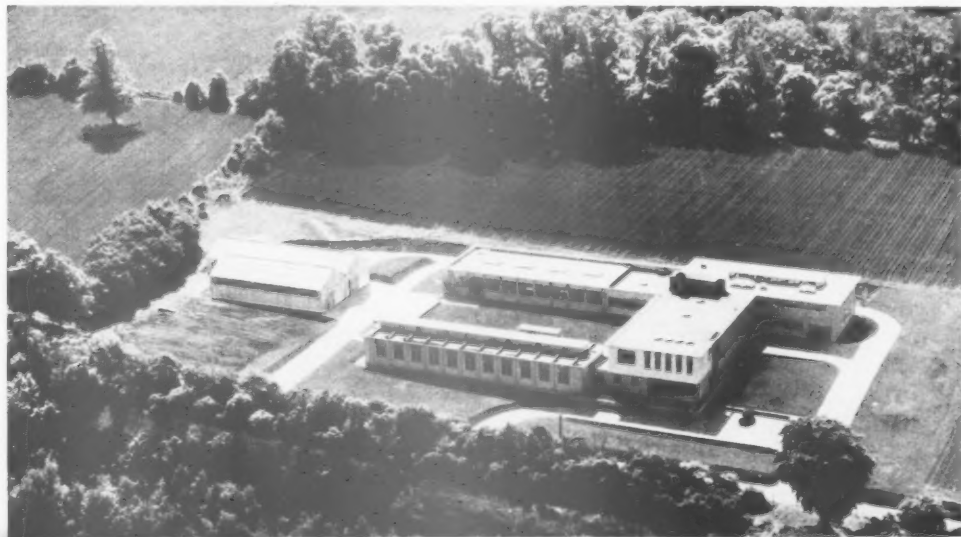
Summing up the three functions, first was the R.C.A., grand and rather pompous, purposefully working for the improvement of design generally throughout the country, then the small young and growing school of architecture full of hope for the future wishing that it could shake off the shackles of the R.I.B.A. final, and finally the long-established independent school, assured, aloof, with a full year's work behind it but with at the same time the knowledge that much remains to be done to its methods and its products before they can be accepted as truly satisfactory. Here are those widely different institutions with the same high purpose, heading in the same direction with the same determination. It does one good to think about them.

#### ELECTRICAL OCCASION

The eagerly awaited electrical section at the Building Centre was opened last week before a distinguished gathering of architects and personages from the electrical world. B.E.D.A. have this time set out to provide a technical exhibit which will help all those professionally concerned with building to understand the importance of electrical installations. Such an exhibition needs to be more fully described than I have space for this week. I shall have more to say about it next week.

ABNER

*New cement research laboratories opened by the Minister of Works last week and illustrated in this issue.*







R.I.B.A. Conference Garden Party. As the sun came out members left the tea tent—and drawn by the sound of the pipes moved down to the lawn of Lauriston Castle.

## NEWS OF THE WEEK

### Bernard Webb Studentship

The Bernard Webb Studentship for the historical and critical study of architecture, which is open to members of the Architectural Association and tenable under the auspices of the British School at Rome, has been awarded to Miss Sheila Gibson, A.R.I.B.A., who will study mosaic decoration in Italy.

### Two New Presidents

Lieut.-Colonel Alexander Cullen, county architect and planning officer of Inverness County Council, has been re-elected president of the Royal Incorporation of Architects in Scotland.

J. W. Train of Glasgow has been elected president of the Scottish National Building Trades Federation (Employers) at the annual meeting

held in Glasgow recently. He succeeds Mr. R. S. Gray of Dundee. New vice-presidents are Mr. James Leggat, Ayr, and Mr. J. B. T. Henderson, Glasgow.

### Building Incentive

A policy adopted in Kilmarnock to speed up construction has proved a valuable incentive. The anticipated construction period for 74 houses placed in February of last year was 12 months. The contractor was advised that completion before that period would result in his receiving rents payable by tenants who were housed, up to the 12 months. If he failed to complete the houses to schedule he in turn would pay the Council rents for the unoccupied and unfinished houses.

### OBITUARY

The death occurred on July 6 of Mr. John James Murray, A.R.I.B.A., at Toronto, Canada. Mr. Murray was the son of the late Mr. John Murray, architect, Kirkcaldy, Fife.

tion was not so much the method as the spirit. It had been inferred that administration based on local control would never get results. But if local control could get the results, that was what mattered. The local boards should be given a chance to succeed, and that they had not yet had. If the National Parks were to succeed, the people who lived in the areas must be given the first chance to make them a success. It was in deference to Welsh opinion that the Minister had agreed to a joint advisory committee for Snowdonia, for an experimental period of three years, instead of a joint board. He did not like the arrangement, but it was much better to give them a chance than to have the local inhabitants hostile.

### Encroachment on Farm Land

Brigadier Medlicott asked the Minister of Agriculture if he was aware that good agricultural land continued to be taken for the provision of playing fields, factories and other purposes to an extent that threatened the food productive capacity of the country; and if he will introduce legislation which would prevent any such land being taken for any other purposes except under the most stringent safeguards.

Sir Thomas Dugdale said that he was aware of the continuing demands upon agricultural land for playing fields, factories and other forms of development. The Department was consulted on all such proposals. He could not agree that the existing procedure had failed in its main object, which was to ensure that no good farm land was lost to food production where it could reasonably be avoided. There were already effective safeguards against the diversion of land from agriculture without full consideration, and he did not think further legislation on the lines suggested could be justified. (July 10.)

### Soundproofing Flats

Mr. Thomas Reid asked the Minister of Housing and Local Government, in view of the inadequate sound-proofing

[continued on page 98]

## IN PARLIAMENT

### National Parks

The administration of the National Parks is causing some concern in the minds of many of those interested in the full development of this project, and an adjournment debate in the House of Commons some time after midnight on July 8 did little to reassure them. This was partly because the time available was so short, as Mr. Marples, Parliamentary Secretary to the Ministry of Housing and Local Government, observed with some justice in his reply.

The apprehension expressed by a Junior Minister in the Labour Government, Mr. Blenkinsop, was that the National Parks, instead of being essentially "national" in character and purpose in accordance with the original conception, seemed to be becoming not much more than local parks. He thought that the Ministry appeared to be speaking in a different language and talking of different things from what

many other people meant by National Parks.

There had been continuous pressure on successive Ministers to whittle away even the small amount of national representation on the several boards provided for in the Act which established the National Parks. In the Peak district this pressure had been resisted, but elsewhere there had been some weakening, and in Snowdonia it was proposed that there should be only an advisory committee—a decision which it was thought could be contested.

After these arguments had been supported by Sir Edward Keeling, Mr. Marples said that it was first necessary to agree on what was meant by a national park and what it was designed to do. In the Minister's view the idea was first to ensure that any areas of natural beauty and recreational possibilities were preserved by street control or development; the second principle was to get rid of some of the blots on the landscape whenever possible; and the third to ensure access.

What really counted in administra-



## THE R.I.B.A. CONFERENCE

**A** WHEEL off the car on the way up, and a broken back axle on the way down did not mar the enjoyment of this year's R.I.B.A. Conference which was held in Edinburgh from May 25 to May 28.

Perhaps these accidents pointed a moral, namely, that there are other dilapidated things than buildings which need repair and that with patience, perseverance and cash—important this—most things can be put right.

It is not for us to step into other people's disagreements, so in making reference to the Lord Provost's resentment of criticism in the Press there is no desire to prolong an argument about the architectural condition of parts of the city. Suffice it to say that, while there was some justification for these criticisms in the past action has been taken and, in view of the fact that work is now going ahead, the pique shown by the city authorities is understandable. The Royal Mile was the marrow of the bone of contention. Complete restoration and rebuilding in this area must take time and, as the Lord Provost pointed out at the inaugural meeting, urgent housing for the homeless has had to take precedence.

The interested visitor to the Royal Mile will, however, find plenty of evidence of the beginnings of a new birth in this area of the city.

On Castlehill there is Canonball House restored some years ago by the Edinburgh Education Authority. Outlook Tower, in the same area, has been completely overhauled in recent years and now serves as a permanent sociological and planning exhibition originally founded by Professor Sir Patrick Geddes.

In Lawnmarket, Gladstone's Land, the headquarters of the Gothic Society, was restored in 1936. Blackie House was restored in 1950-52 by Hamilton and Kinnaird Estates, Ltd., and is now a block of good class residential flats. Edinburgh Corporation has recently restored 435 Lawnmarket and 17-20 Bank St., and the Carnegie Trust are at present rebuilding Fisher's Close as the Scottish Central Students' Library.

In Canongate the buildings from Morocco Land to New Street are now part of a rebuilding scheme commissioned by the Edinburgh Corporation in 1951. Included in this scheme are Chessels Court and Pirrie's Close. These areas will provide about 100 new houses and several new shops.

Another scheme which will provide about 27 houses and 8 shops is approved in detail and about to go out to tender. This includes buildings from Shoemakers Land to the Canongate Tolbooth. The latter is scheduled for restoration by Edinburgh Corporation as an exhibition and social centre as soon as a permit is granted by the Ministry of Works.

In addition there are many properties which have already been restored.

Moreover much of the proposed work will be more than pure restoration. Robert Hurd, A.R.I.B.A., who is responsible for two biggish schemes in this area is introducing colour in a big way and, far from being backward, the city authorities are pushing the architect hard for finished drawings. By and large there seems to be great hope for the Royal Mile in the near future. A city which is far-sighted enough to vote the money for the Festival can be relied upon to bring the same bold policy to bear in tidying up its slums—slums for which the present authorities were

not responsible. "Little drops of water, little grains of sand."

The writer's impression of Edinburgh to-day is that this city will be a leader in things architectural. There is a live and closely knit architectural brotherhood in the city. There is life in Edinburgh—not mere existence. Apart from architecture the shops, the women's clothes (and figures and faces), the parking arrangements for cars, the food in the restaurants, all give the impression that Edinburgh is determined to have the best of both worlds—the old with all its good manners and the new.

At the opening reception on Wednesday evening members of the Conference were the guests of the Royal Incorporation of Architects in Scotland and were received by the President R.I.A.S., Lt.-Col. A. Cullen, and Mr. A. Graham Henderson, P.R.I.B.A. Light music of the "palm court" variety was mercifully not in evidence. Instead fisherwomen from Newhaven, in local costume, sang traditional fishing songs.

The assembly rooms in which the receptions and lectures were held would have been too large for many functions. But for the record attendance of this year's conference they were comfortable. At the inaugural meeting on the Thursday morning Mr. J. Steel Maitland, F.R.I.B.A., "an unrepentant traditionalist," read a paper on "Scottish Housing, Past and Present"; a paper filled with pawky humour and sly digs at the Ministries; a paper

*Eight-storey tenements seen from the top of Calton Hill. A strange contrast to the fine views of Princes Street which can be had from almost the same viewpoint.*





1. The President, Mr. Graham Henderson, tells the Secretary, Mr. Spragge, that this snapshot photography is chickfeed after the Canadian Tour—or words to that effect.



2. Mr. D. E. E. Gibson, of Coventry, with Mr. William McCrea, President of the Glasgow Institute of Architects.

3. (L. to R.) Mr. E. L. Thompson with Mr. Wilson of the Cement and Concrete Association. Mr. Wamsley Lewis, Mrs. Charles Wood and Mr. Charles Wood of Twistell Ltd.

4. (L. to R.) Mr. and Mrs. Kenyon of Newcastle, Mr. Dempster of the Coal Board, and Mrs. Miles White.



which may well have given strangers north of the border a false impression of what the Scots are doing.

Mr. Maitland deplored that national characteristics were being blended into flat faced mediocrity; he pointed out that, in the past, Scottish thrift and perfection of building had resulted in architecture which had outlived its contemporary use. For prefabricated housing Mr. Maitland had little to say, and of the present-day architect he said "The architect has become the slave not the master of materials." "They (architects) are dictated to by young men in ministries who have no knowledge of design."

Mr. Maitland having deplored the cosmopolitan nature of housing design to-day, Mr. Livett, City Architect of Leeds, proposed a vote of thanks. Mr. Livett drew attention to the recent reductions in plan sizes which he said were tantamount to reduction in standards. The vote of thanks was seconded by Mr. Llewellyn Smith who complimented the speaker on his clever arrangement of "those prefabricated units—words."

In the discussion which followed Mr. Walter Barrett, A.R.I.B.A., representing the Pembrokeshire County Council, said that the Government should be approached to allow architects a chance of settling the housing problem. He did not enlarge on this suggestion.

Mr. Cecil Howitt of Nottingham and Mr. Blackett of Newport brought the meeting back to earth. Both mentioned rents as the key problem in housing. "Rents," said Mr. Blackett, "are the challenge to architects who have been asked by the Government to find a solution to the housing problem." Reduction of circulation space, simpler design and "the flat faced stuff" went a long way to keeping costs down, said Mr. Blackett.

The second paper, delivered by Mr J. L. Womersley,



5. (L. to R.) Mr. Basil Spence is shooed in front of the camera by Mrs. Spence on the steps of their home and office at 40, Moray Place. Professor Gordon Stephenson leaves Basil Spence's cocktail party to attend the Conference Dinner. Mrs. Johnson, representing the Anglesey County Council, with Mr. Johnson in Edinburgh Castle.

6. Mr. E. H. Bloomfield who represented the City of Liverpool and Mrs. Bloomfield.

7. Mr. and Mrs. Culpin with their backs to the fields and the Forth.

6



7



## THE R.I.B.A. CONFERENCE

Borough Architect of Northampton, and published in the A. & B.N. of July 3, was full of good material.

Students of the Edinburgh School of Art and Architecture held a luncheon on the Thursday. Here, after an excellent lunch, we were shown the first fruits of an exhibition, now in course of preparation, for the Festival which opens in August.

The student organizers deserve the highest praise for this exhibition which will consist of drawings sent to Edinburgh from Schools of Architecture abroad. Finland, S. Africa and Vienna have already sent drawings and more are on the way from Australia, Belgium, France, Greece, Switzerland and U.S.A.

The garden party was held on the Thursday afternoon at Lauriston Castle which lies off the Queensferry Road. Perhaps the authorities who had decided against a general photograph this year had a tame weather prophet. Certainly the party started in weather which would have broken a photographer's heart. To make matters worse cars had to be parked a long way from the entrance gates. Just inside the gates two recumbent stone sphinxes (feminine) greeted the visitors unsympathetically as they plodded their way up the long drive to the much restored,



Lauriston Castle at the start of the Garden Party



Penguin parade in the rain

F.R.S. Yorke meets another Scot and the Forth Bridge, both for the first time



castellated and turreted castle. A notice at the end of the drive directed us to a drinking well but this proved to contain water. We therefore hastened towards the tea marquee. Had the well contained anything stronger our surprise at meeting a sort of Witenagemot of Penguins in full pomp might have been explained. But they were real (from Edinburgh Zoo) and highly diverting.

The sun broke through, however, in time to let us out of the tea tent on to the lawns to see and hear and marvel at the precision playing of a pipe band. No wonder the Scots are proud of their heritage. And even though the pipes may be an acquired taste for the Sassenach there is no gainsaying the thrill of watching these Scots with the Forth in the background.

The Conference programme is necessarily a crowded one. There is never enough time to do all that should be done and when it comes to evening functions the ladies demand, what seems to a mere male, an undue curtailment of refreshment time so that they (the ladies) can get suitably or unsuitably rigged for the evening frolic.

The civic reception and ball at the Assembly Rooms was a great success. There were two ballrooms (crowded), one bar (crowded), and an exhibition of drawings illustrating current thought in Scottish architecture.

For those from south of the border the highlight of the evening was the exquisitely performed Scottish dancing. An eightsome in England is generally a sorry sight, even although a lot of imagined Scottish noises are made and at least six people out of the eight have their own ideas of what to do next—the other two being *laissez faire*. To see it done, not merely with precision but with ballet-like grace, is indeed an experience.

On Friday afternoon members of the Conference divided to go on their selected tours.

Tour No. 3, round the City of Edinburgh, included St. Giles' Cathedral (where Mr. Esme Gordon gave a fascinating account of the Cathedral's development), the Royal Mile and the Castle. The tour was to have included Holyrood Palace but the Royal Garden Party was in progress. This confined sightseeing to a glimpse of the outside.

In the Castle the party became somewhat interwoven with other conducted tours and Mr. Thomas McCrae had some difficulty in keeping his flock together. At one time we got amalgamated with the United States Navy much to the bemusement of the naval member.

In the evening Mr. Basil Spence and Mrs. Spence held a cocktail party before the Conference dinner. Amongst those present were Mr. and Mrs. Gardner Medwin and Professor and Mrs. Gordon Stephenson.

At the dinner in the evening male guests found a small bottle of Vat 69 in their places. It was interesting to watch those who took this as an aperitif and those who kept it to take away. It was also interesting to note that the port went round the wrong way.

Honours for the best speech went to the Earl of Home. Are they worth while these Conferences? The answer must surely be yes. They provide an annual opportunity for increasing the unity in the profession which the President stressed in his opening speech. What could be done to improve their value? At present the morning meetings give too little opportunity for members to speak. The papers themselves could surely be published in advance and taken as read. More time would then be available for discussion. Alternatively, could not a subject for discussion be chosen in advance and circulated to the various allied societies who could then nominate speakers for the Conference? In this way several areas could put their views at one session. The Conference is such an excellent opportunity for exchange of views it seems that greater use should be made of that opportunity.

CHARLES CRICHTON

## SERVICE STATION COMPETITION RESULT—II

*Sponsored by Shell-Mex & BP Ltd.*

### Assessors' Report

Continued from A. & B.N. issue of July 10, 1952

#### Section A. Second—No. 208 G. M. Crockett

This design is similar in siting to that placed first, the character of the building is pleasant, and is sensitively detailed. The garden arrangement of the forecourt is attractive although perhaps a little "over architectural." Both the repair bay and the lubricating washing bay are too restricted in width, the first vehicle on the elongated pit of the repair bay tending to get "boxed in." The daylighting of the repair bay could be improved.

The Shell and BP sign would be better arranged if mounted to face the traffic rather than into the canopy front parallel to the road, as indicated.

#### Highly Commended—No. 97 Jack Tomlinson

This scheme has a most attractive informal character admirably suitable to a rural setting. In particular the Dutch Barn type roof and the flexibility permitted in the choice of walling materials are admirable. A junk and salvage enclosure is a sound suggestion of the plan, a feature noted on several other schemes. Access to the washing bay is not good but can easily be improved.

#### Highly Commended—No. 183 N. H. Notley, D. W. Notley

This scheme provides a simple lucid layout. The building has a strong and coherent architectural character. While the forecourt is excellently treated, the placing of the island itself is unsatisfactory since excessive wheel locking is occasioned.

All the prize-winning schemes indicate simple, straightforward structural methods likely to prove economical in erection.

#### Section B. Second—No. 80 G. H. Fletcher, R. T. Miller

This design is a well-modelled scheme of great distinction and assured in its handling. The parking arrangements shown on each side of the forecourt are less satisfactory than the winner's. The manoeuvring space to the night parking bay is somewhat cramped.

The placing of the showroom and the washing and greasing bay under one sloping roof is an attractive idea, and this block together with the adjacent rather decorative administrative block is well resolved by the simple repair and garage building behind.

Some of the detailed architectural design requires further study, and, in particular, a more realistic approach; for example, the little recessed garden looks rather whimsical in treatment; the boiler house flue is given an architectural treatment over-expressive for its function; and the long sign in front of the forecourt would be difficult, if not impossible, to read by the approaching motorist. The layout of the island is good.

#### Highly Commended—No. 184 Margaret A. Paul, Arthur A. Baker

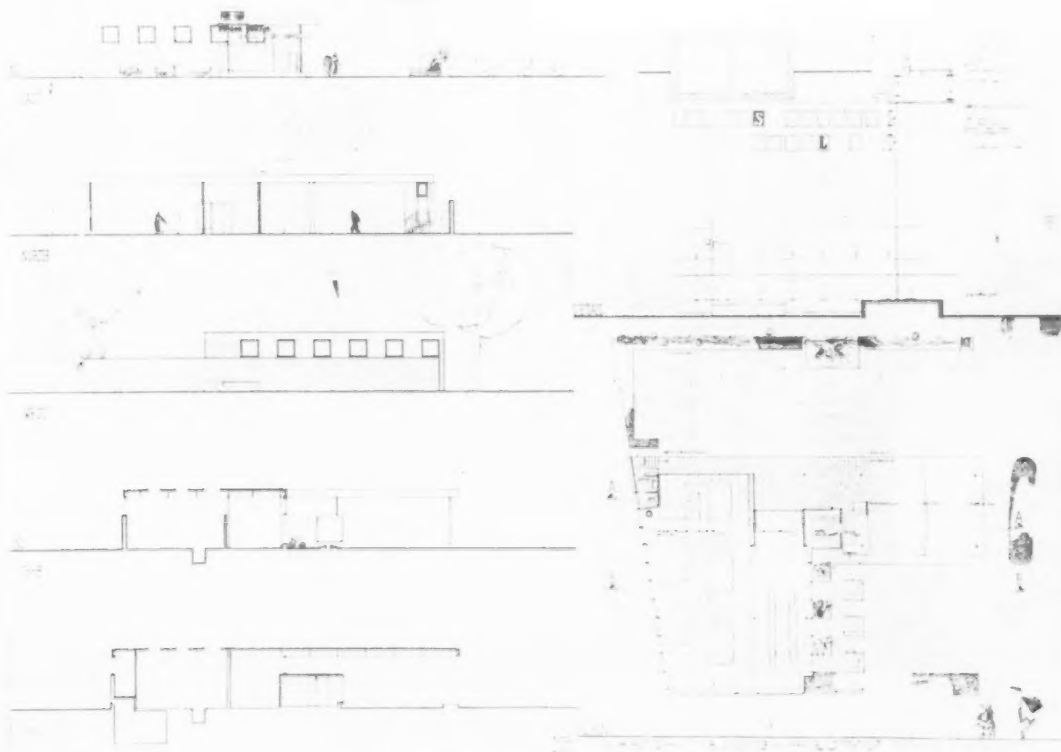
This solution attempts, successfully, to house all the accommodation under one roof, achieving thereby a simple box. The approach has much merit which we wish to commend. The showroom, very well placed, with a mezzanine office space, is an attractive feature of the design. The gallery waiting space might well have overlooked the workshop area. The washing and lubricating bays are not as well seen from the forecourt as in the winning designs. The total workshop area is much in excess of the approximate Condition requirement, due to covered circulation waste. The approach to the islands from the road is very cramped and the layout of the islands needs reconsideration. The filling of the storage tanks is unsatisfactory compared with the winner's arrangements.

The treatment of construction and general finishes proposed is expensive, but might well become a practical proposition if a series of garages were erected, for which the design is obviously suited.

#### Highly Commended—No. 95 Frederick Thomas, Jan Cybulski

This design is commended as being a most practical and economical solution, although it is not very distinguished in appearance. The

Section A. Country Service Station  
Design awarded second prize by G. M. Crockett, A.R.I.B.A., A.M.T.P.I.





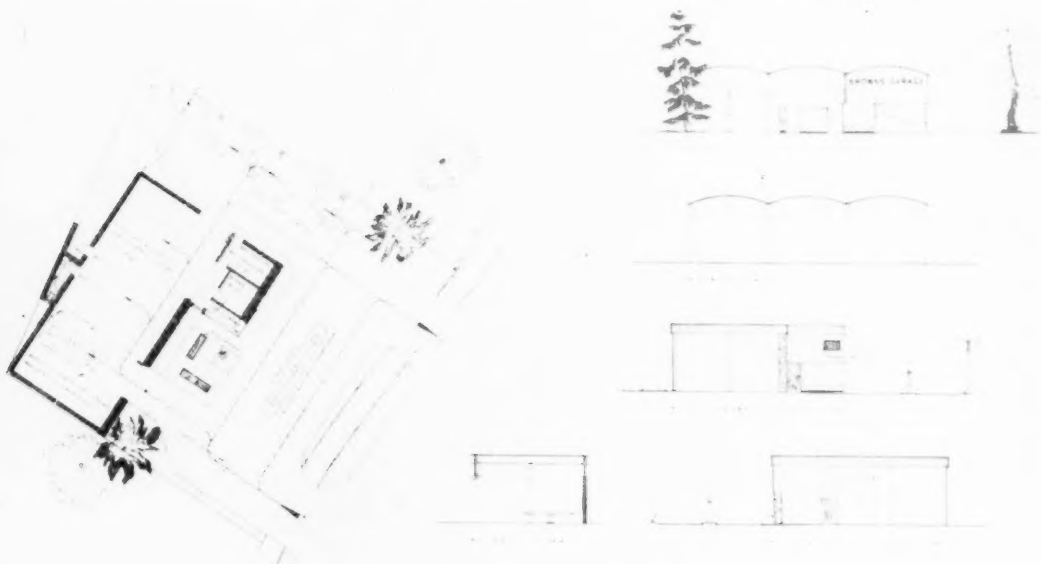
scheme provides a concealed courtyard access to all sections of the workshop area—a very good proposal which permits this area to be completely cut off from the forecourt by means of gates at each end. The circulation is in this case, however, a little restricted. Parking on the forecourt is better avoided as in the case of the winning design. The islands are elaborate. The well-written, detailed explanatory report is worthy of note.

**Section C. Second — No. 382 Alan Reich, Ralph Cowan, T. R. Spaven**

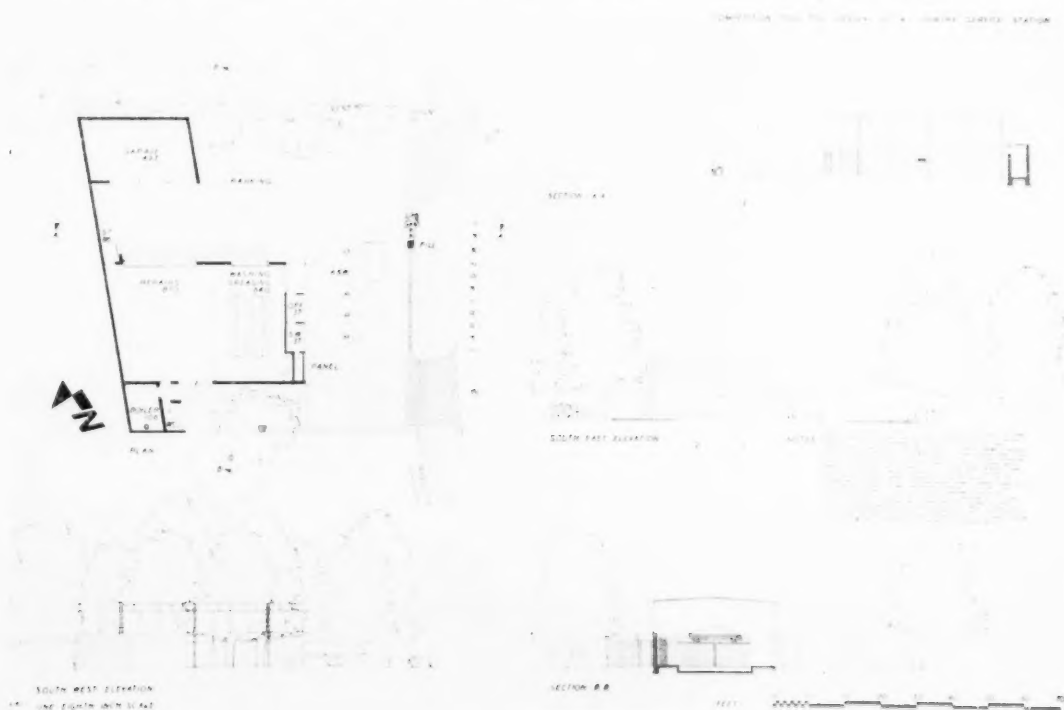
This scheme gives a remarkably good layout of buildings. Particularly noteworthy are the workshop bays planned in conjunction with the overnight parking space. The repair bays would be better placed side by side without physical sub-division, although the daylighting arrangements as shown are excellent.

**Section A. Country Service Station**

Highly commended design by Jack Tomlinson, DIPL. ARCH. (LIVERPOOL), A.R.I.B.A.



Below, highly commended design by N. H. Notley, DIPL. ARCH., A.R.I.B.A. & D. W. Notley, B. ARCH., A.R.I.B.A.





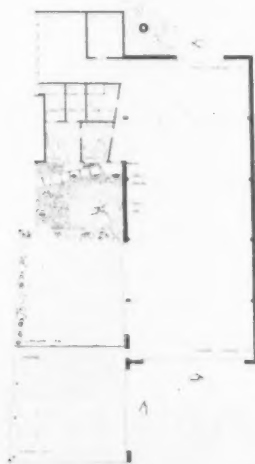
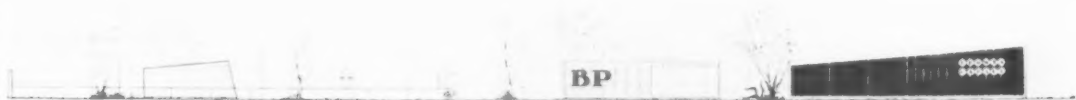
Circulation is good about and in the buildings, apart from that about the pump island. A much more clearly defined one-way flow appears desirable. The showroom, although well placed, would be better if fully glazed on the east side. The forecourt presents rather a "sea" of paving, difficult to justify in terms of circulation, and most unattractive in appearance. The storage tanks fill pipes are so placed as to cause obstruction at the entry by tankers.

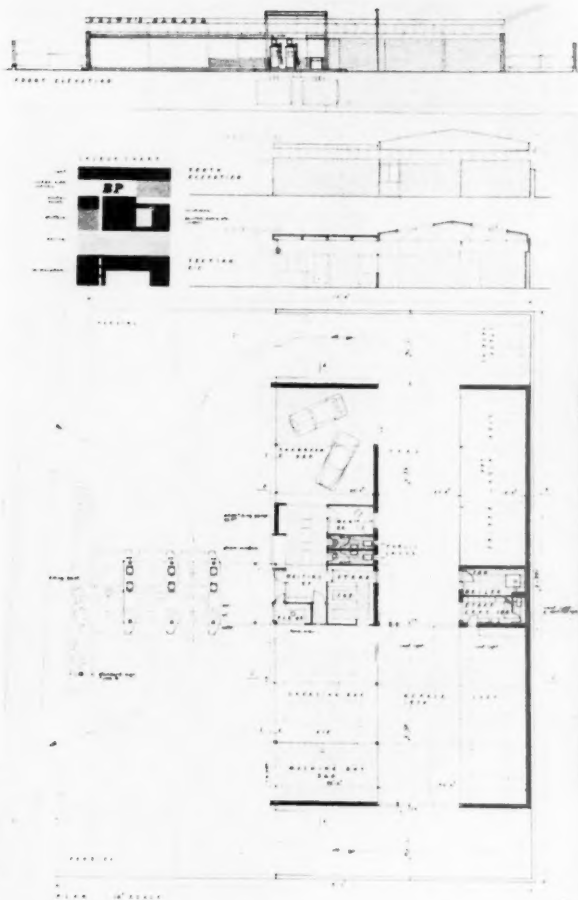
**Highly Commended — No. 403 Phillip Brown, Gordon Elliott**

This design provides a most attractive layout of buildings, which focuses the maximum attention on both the showroom and the washing and greasing bays. The latter are placed in separate glass houses which, although imaginative in idea, are obviously impracticable; they would obviously be more

**Section B. Suburban or Neighbourhood Service Station**

Design awarded second prize by G. H. Fletcher, DIPL. ARCH. (DUNELM), A.R.I.B.A., R. T. Miller, B. ARCH. (DUNELM), A.R.I.B.A.





satisfactory if placed under one roof as is the case with the scheme placed second. The structure, although perhaps over-elaborate, is a reasonable and stimulating expression of the function. Some of the detail design is weak, particularly the handling of the canopies.

**Highly Commended—No. 335,  
Paul Boissevain, Barbara  
Osmond, Horacio Caminos**

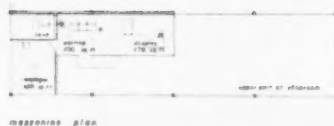
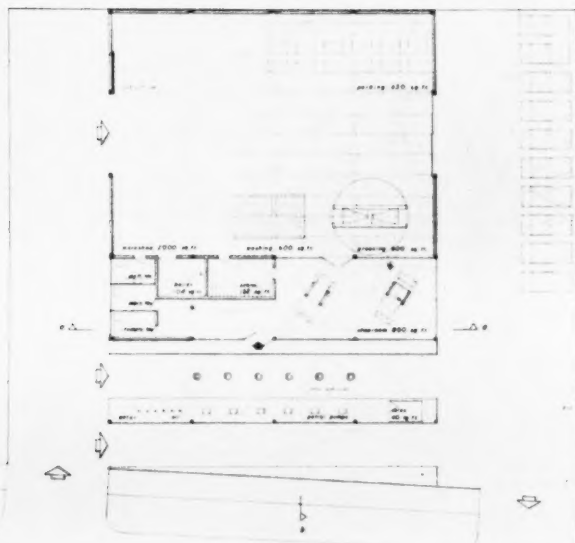
This scheme, as No. 184 in Section B, attempts to provide one roof over the whole of the accommodation. The idea is good and in this case is worked out to give satisfactory circulation and working arrangements. The appearance of the building is rather dull.

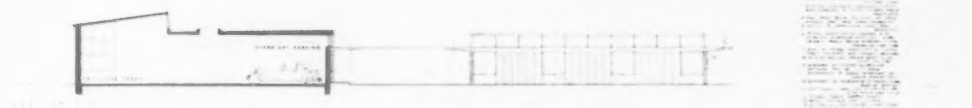
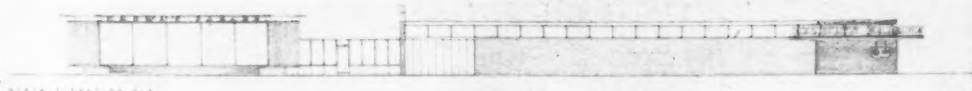
The shape of the pump island appears forced, and a standing tanker in the lay-by (a good suggestion in itself) would, on account of its position, tend to obscure the view on to the forecourt. The offices are not well placed, being located entirely within the building, and the lock-up stores could be better located to avoid partial blocking of the view into the washing and lubricating bays.

**Section B.  
Suburban or Neighbourhood  
Service Station**

**Highly commended design  
by F. Thomas, B.A.R.C., A.R.I.B.A.  
and Jan Cybulski, DIPL. ARCH., A.M.T.P.I.**

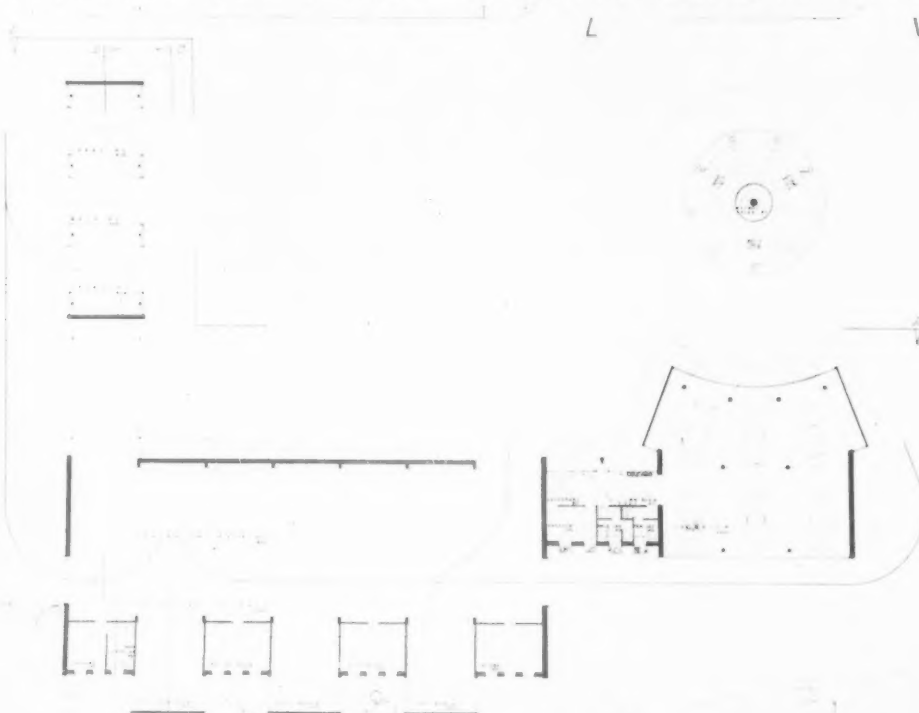
**Highly commended design  
by Margaret A. Paul, A.R.I.B.A.  
and Arthur A. Baker**



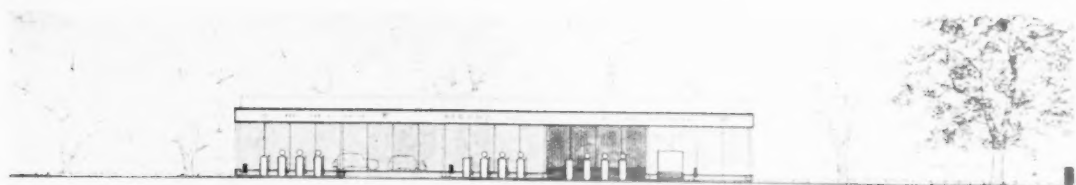


SECTION C  
MAIN MOTORWAY SERVICE STATION  
DESIGNED BY ALAN RELOCH, A.R.I.B.A., A.M.T.P.I. RALPH COWAN, A.R.I.B.A., A.M.T.P.I.  
T. R. SPOVEN, A.R.I.B.A.

# COMPETITION FOR A MAIN MOTORWAY SERVICE STATION



Section C. Main Motorway Service Station  
Design awarded second prize by Alan Reloch, A.R.I.B.A., A.M.T.P.I. Ralph Cowan, A.R.I.B.A., A.M.T.P.I.  
T. R. Spaven, A.R.I.B.A.



Front elevation



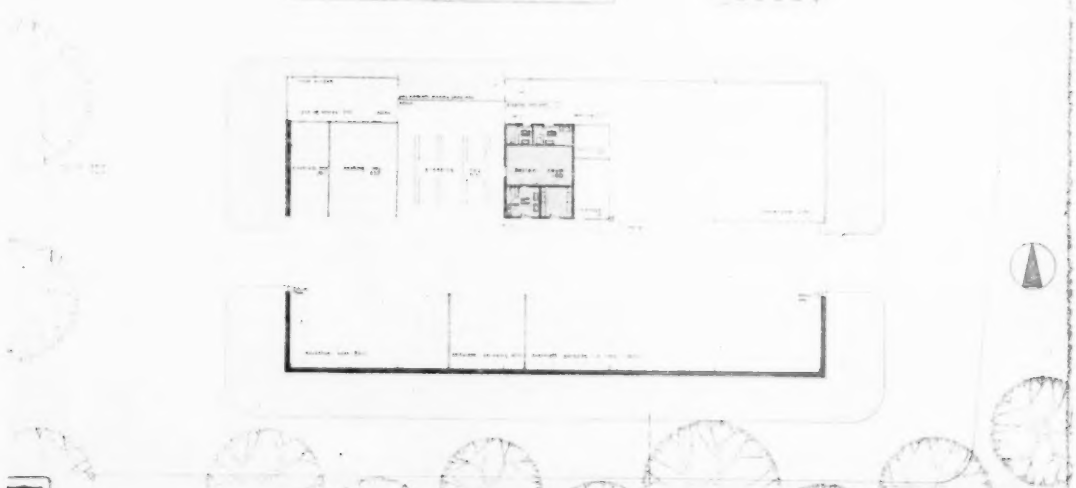
Side elevation



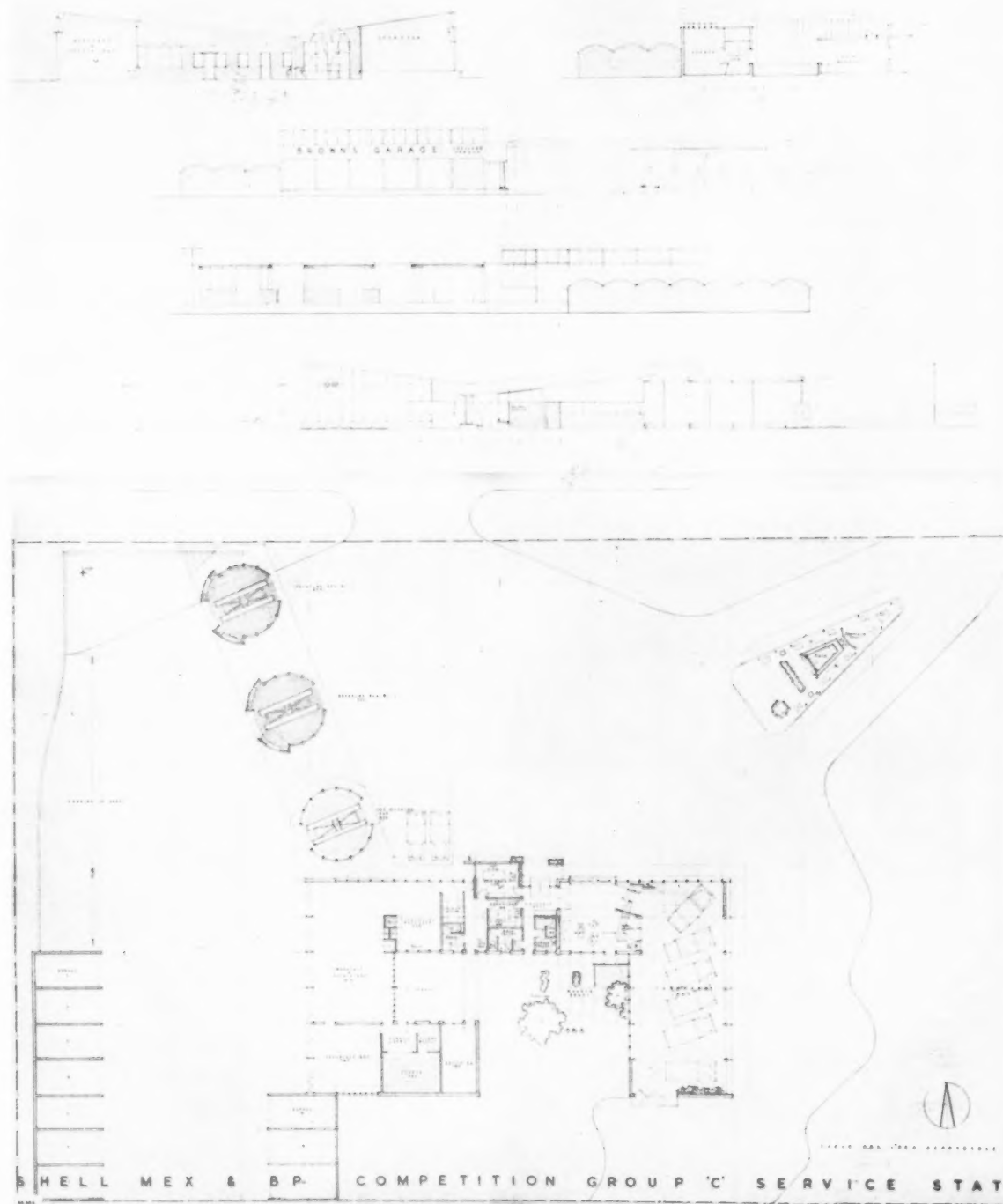
SECTION A-A



SECTION B-B



Section C. Main Motorway Service Station  
Highly Commended design by Paul Boissevain, DIPL. ARCH., M.S.I.A., Barbara Osmond, A.R.I.B.A.,  
in association with Horacio Caminos



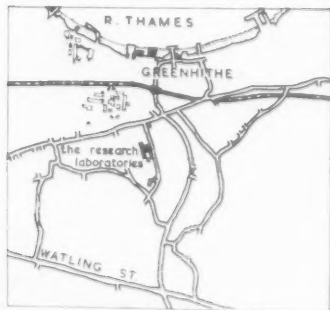
Highly Commended design by Phillip Brown, B.A.R.C.H., A.R.I.B.A., in association with Gordon Elliott



*The Main Entrance showing facing of cast stone and Library windows to first floor.*

**RESEARCH LABORATORIES, GREENHITHE, KENT**  
**for the Associated Portland**  
**Cement Manufacturers Ltd.**

architects :  
 WESTWOOD, SONS & HARRISON, F.F.R.I.B.A.  
 chief assistant :  
 NOEL BRANDON-JONES, A.R.I.B.A.



ORGANIZED research in the Cement Industry started before the first world war with the establishment of the British Portland Cement Research Association. The activities of this Association were taken over by The Associated Portland Cement Manufacturers Limited in 1925 to operate for The Blue Circle Group of Companies.

The ever-increasing programme of work necessitated more spacious and modern accommodation, and the new laboratories were scheduled as a priority post-war development. Although the building was originally designed in 1946, it was not until 1950 that a licence was obtained to start work.

At the beginning of 1952 the new Research Laboratories at Greenhithe were ready and a move was made into them.

The architects were required to design a building providing chemical and physical testing laboratories and ancillary accommodation, an administrative block and a staff canteen, together with a subsidiary building for machinery and storage. The site near Stone Castle is an open one sloping fairly steeply to the south-east. After examination of the site it was clear that the careful use of varying floor levels would be a fundamental factor influencing the design.

#### *Siting and Layout*

The accommodation required falls naturally into three main groups: (1) Administrative Offices, which are placed in a block running east and west at right angles

to the approach drive, (2) Chemical Laboratories which form a single storey wing projecting southward from the east end of the Administrative Block, and obtaining its main daylight from the east, and (3) Physical Testing Laboratories forming a similar single storey wing to the west. This latter wing also extends a short distance north of the Administrative Block, where it accommodates a Staff Canteen on the first floor.

The site slope already mentioned is approximately 12ft diagonally across the building. The Main Entrance is at the lowest point in the north-east corner and at the same level as the Chemical Laboratory. This level lies intermediately between the Administrative Block and the basement under. The Offices are placed almost at right angles to the contours and the basement is well lit for most of its length. The curing room, which must be protected from temperature changes, occupies the end which is underground. The Physical Testing Laboratories are placed at the highest part of the site, and at the same floor level as the Administrative Block, but have no basement under.

A concrete service road runs completely round the back of the building, allowing for easy delivery of goods.

To the south of the service road, independent of the main buildings, is the Machine Shed and Store, a light steel-framed structure with a cladding of asbestos-cement sheeting, above a plinth of 9in hollow clinker concrete blocks.

The grounds immediately surrounding the building have been laid out with lawns and an informal arrange-

*The building from North-east showing Chemical Laboratories on extreme left, the Administration Block in the middle and the Workshop and Grinding Rooms on the right.*





ment of trees and shrubs, selected in order to give a pleasing setting to the building at all seasons of the year with the minimum of maintenance. A concrete wall faced with Kentish Rag forms a link between the building and its surrounding gardens.

#### Structure and Materials

Suspended floors and roofs throughout are of reinforced concrete.

External walls generally are of cavity construction, the outer skin being  $4\frac{1}{2}$  in hollow clinker concrete blocks and the inner skin  $4\frac{1}{2}$  in hollow foamed slag concrete blocks. (The Company's new lightweight aggregate LECA was not in production in time to be used in this building.) Basement walls are solid, consisting of  $7\frac{1}{2}$  in of reinforced concrete with  $4\frac{1}{2}$  in hollow foamed slag concrete blocks forming a permanent shuttering on the inner face, the concrete being bush hammered to expose the aggregate where above ground level. The walls above ground floor level are finished externally with oyster pink "Cullamix" Tyrolean texture except on the Library, over the main entrance, where cast Portland Stone facing slabs have been applied. A bas relief symbolizing chemical research forms a decorative motif on the north wall of the Library. This was designed by Eric Peskett, A.R.C.A., and cast as part of the facing slabs. Cast Portland Stone was also used for window surrounds, sills, jambs and heads, the latter being cast *in situ* as an integral part of the beam casings. Concrete bricks were used to give relief in places between windows. The cornices and door hoods are of reinforced concrete with a surface direct from wrought shuttering. Internal wall surfaces generally are plastered and distempered. In the Chemical Laboratories the plaster is finished with

special acid-resisting paint, and walls have a dado of glazed tiles with acid-resistant jointing.

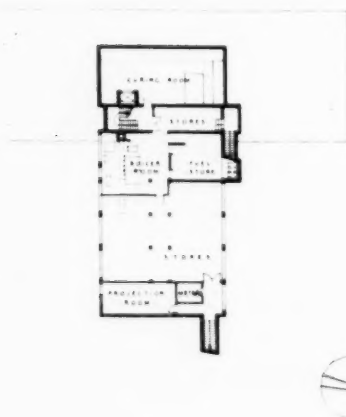
A Cullamix rubbed Tyrolean finish has been applied to the walls of the Main Entrance Hall and Stairs. Reinforced concrete floors and roof slabs were cast *in situ* on a permanent shuttering of wood-wool-cement slabs providing sound and heat insulation. In the Canteen the wood-wool slabs are left exposed for acoustic reasons. (This would have been another use for LECA had it been in production at the time.) Roofs are surfaced with asphalt. Floors are finished with thermoplastic resin-bonded tiles in Offices, Canteen and in Laboratories not subject to heavy wear or damage by chemicals. Granolithic paving has been used in the main Physical Testing Laboratory and other heavy duty rooms and in all Lavatories and Cloakrooms except that adjacent to the Main Entrance, where flooring is in Terrazzo, as also in the Main Entrance Hall and staircases.

Throughout the Chemical Laboratory wing hardwood (Missanda) blocks have been selected for chemical-resistant qualities. In the Library cork tiles are used for quietness. In the Canteen Kitchen the flooring is a special grease-resistant coloured concrete tile. Similar tiles are also used for dadoes in the Canteen Kitchen and in Lavatories and also for window sills in most rooms. Terrazzo tiles are used for sills in the Canteen and as a wall finish adjacent to the Main Entrance.

Window frames generally are in aluminium alloy. In the Chemical Laboratories themselves, which are artificially ventilated, plate glass fixed lights are set direct with hardwood beads into reconstructed stone frames treated with acid-resistant paint internally. Glass brick panels have also been largely used to obtain the high degree of lighting required, without sacrificing thermal insulation, and at the same time to reduce to

*Continued on page 94*

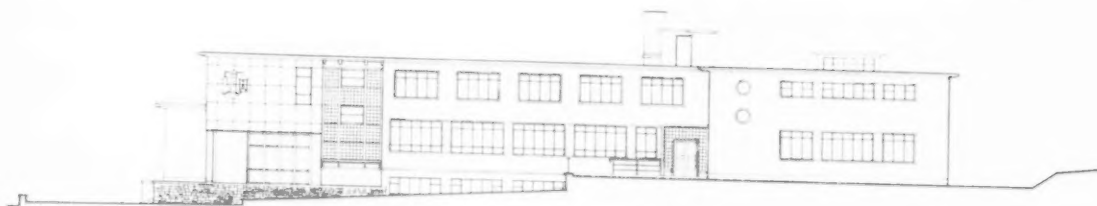
#### RESEARCH LABORATORIES, GREENHITHE



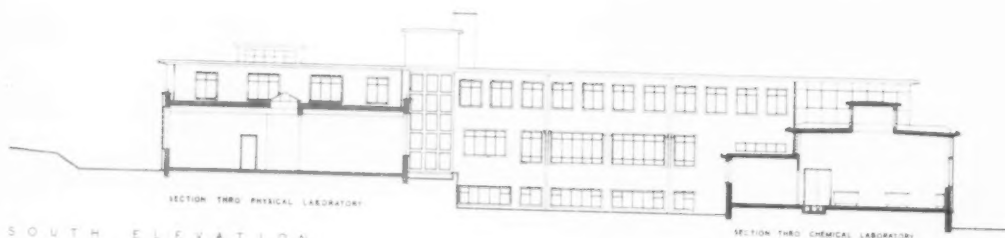
BASEMENT PLAN



FIRST FLOOR PLAN

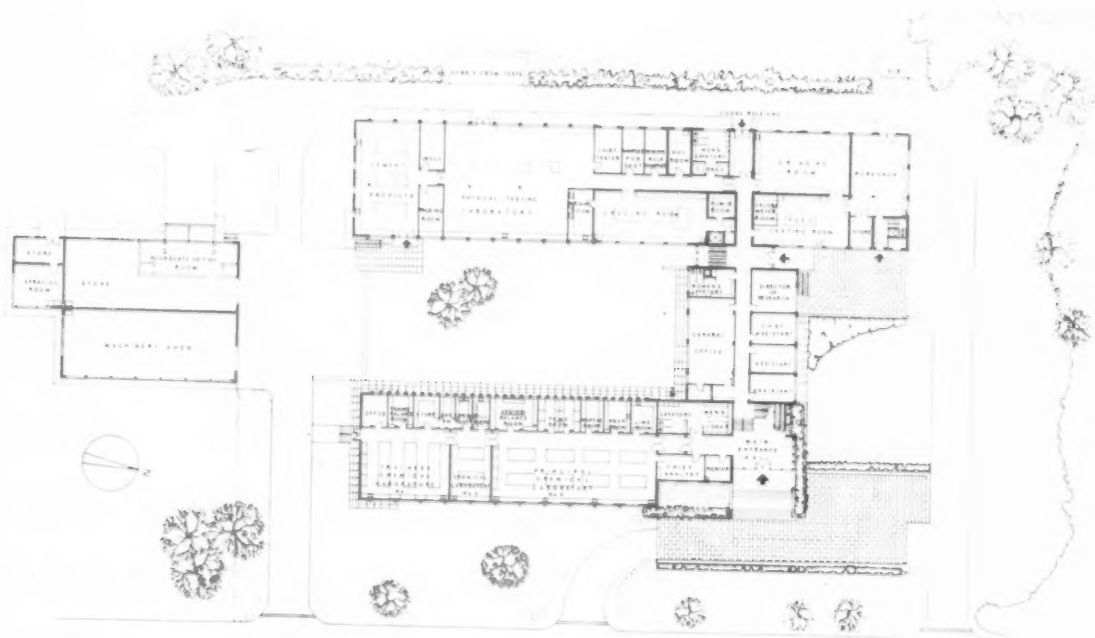


NORTH ELEVATION



SOUTH ELEVATION

SECTION THRU CHEMICAL LABORATORY



GROUND FLOOR PLAN





Top left: The Canteen.

Top right: The Raw Materials Laboratory.

Bottom left: The Physical Testing Laboratory.

Bottom right: One of the Chemical Laboratories

(Continued from page 92)

a minimum metal components that would be liable to corrosion.

#### Heating and Ventilation

The building in general is naturally ventilated and is heated by hot water radiators. In the main Physical Testing Laboratories radiators are replaced by overhead unit heaters in which the air is warmed by passing over a hot water coil and is then circulated through the room by means of an electric fan. The Chemical Laboratories rely entirely on artificial ventilation. Fresh air is drawn from outside, filtered, warmed and blown out into the laboratories by special unit heaters at bench level. Used air is drawn out by propeller fans in the clerestory and also through fume cupboards. Normal ventilation is at a rate of four air changes per hour, but additional fans are provided to increase the rate to twelve changes per hour when necessary.

In the Physical Testing Division three rooms—the Hot Room, Humid Room and Curing Room—have

thermostatically controlled electrical heaters in order to secure the constant temperature required. The Humid Room has, in addition, a refrigerating plant, which is automatically brought into play when the temperature rises, and a misting system to secure the necessary humidity.

#### Services

A special problem was presented by the large number of services required in the building. As far as possible these have been concealed, but at the same time kept easily accessible, by the provision of ducts with removable covers, or by running them behind benches with removable back panels. Particular care has been taken to avoid any exposed services in the Chemical Laboratories on account of the risk of corrosion. In the Physical Testing Laboratories services have largely been run on the surface, in order to have flexibility as regards type and position of apparatus.

Architects: WESTWOOD SONS & HARRISON

Structural Engineers: E. P. WELLS, COCKING & MESTON

Consulting Engineers for Services:  
A. F. MYERS & PARTNERS

Quantity Surveyor: CYRIL SWEETT

General Contractor: RICHARD COSTAIN LTD.

**Subcontractors and Suppliers:**

Asphalt Roofing: Excel Asphalt Co. Ltd. Asbestos Cement Sheet: Baddy Roofing Co. Ltd. Balustrades and Railings: Adrian Stokes Ltd. Canteen Cooking Equipment: Falkirk Iron Company. Cast Stonework: Stuart's Granolithic Co. Ltd. Cement Glaze: Robb's Cement Enamel Finishes Ltd. Concrete Blocks: Atlas Stone Co. Ltd. Concrete Bricks: Dunbrik Ltd. Convecter Heaters: British Trane Co. Ltd. Doors (Flush): Shapland & Petter Ltd. Electrical Installation: Rashleigh Phipps & Co. False Ceilings: Tentest Fibre Board Co. Ltd. Fibrous Plaster: G. Jackson & Sons Ltd. Flooring: Karkoid Decorative Floors (Cork); Hollis Bros. (Semiastic Tiles and Missanda Blocks); Fenning & Co. (Terrazzo). Glass Domelights: T. & W. Ide Ltd. Glass Bricks: Pilkington Bros. Heating and Ventilating: Norris Warming Co. Ltd. Ironmongery: Yannedis & Co. Ltd. Joinery: P. H. Barker & Son Ltd. Laboratory Fittings: Baird & Tatlock Ltd. Library Shelving: Luxfer Ltd. Lifts: Bennie Lifts Ltd. Light Fittings: General Electric Co. Ltd. Sanitary Fittings: Shanks & Co. Ltd. Steel Lockers: W. B. Bawn & Co. Ltd. Steelwork: Moreland Hayne & Co. Ltd. Tiling: F. Cope & Co. (Glazed); Standard Pavements Ltd. (Concrete). Windows: Williams & Williams Ltd. (Aluminium); Jayanbee Joinery Ltd. (Wood). Wood Wool Slabs: Gyproc Products Ltd.



The overhead dome lighting in the Library

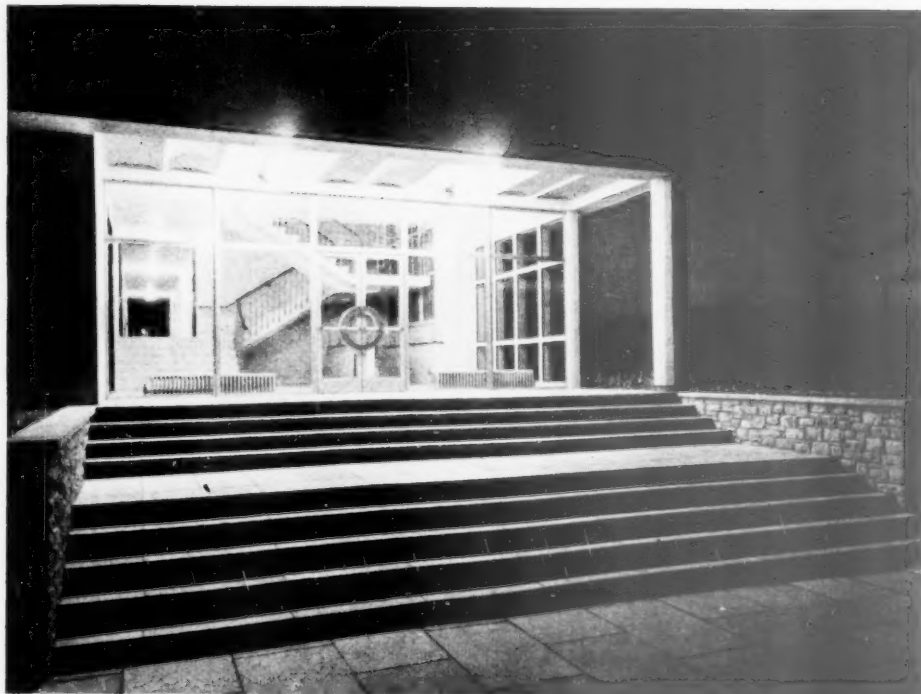
The Library viewed from the reading room



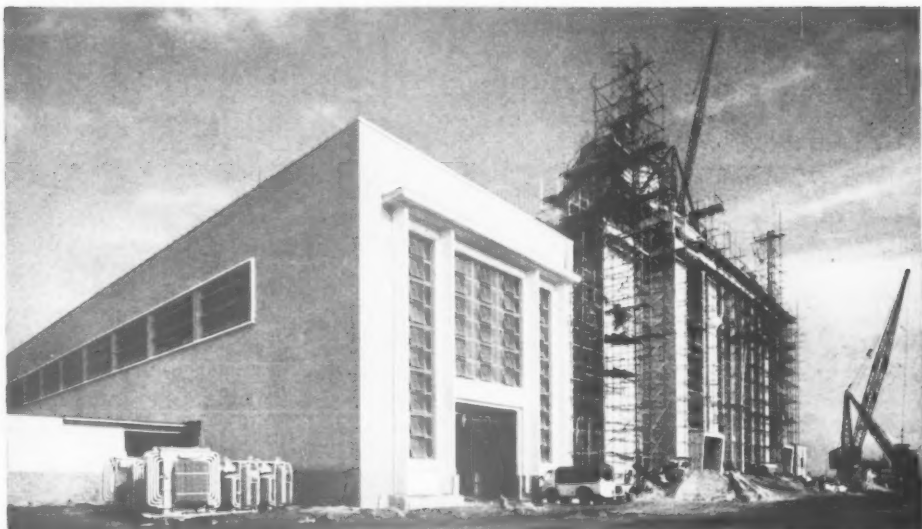


The Main Entrance Hall and Staircase.

The Main Entrance by night.



RESEARCH LABORATORIES, GREENHITHE, KENT.



## USKMOUTH POWER STATION, SOUTH WALES

*L. G. Mouchel & Partners, Consulting Civil Engineers*

*Johnson Blackett, F.R.I.B.A., Consulting Architect*

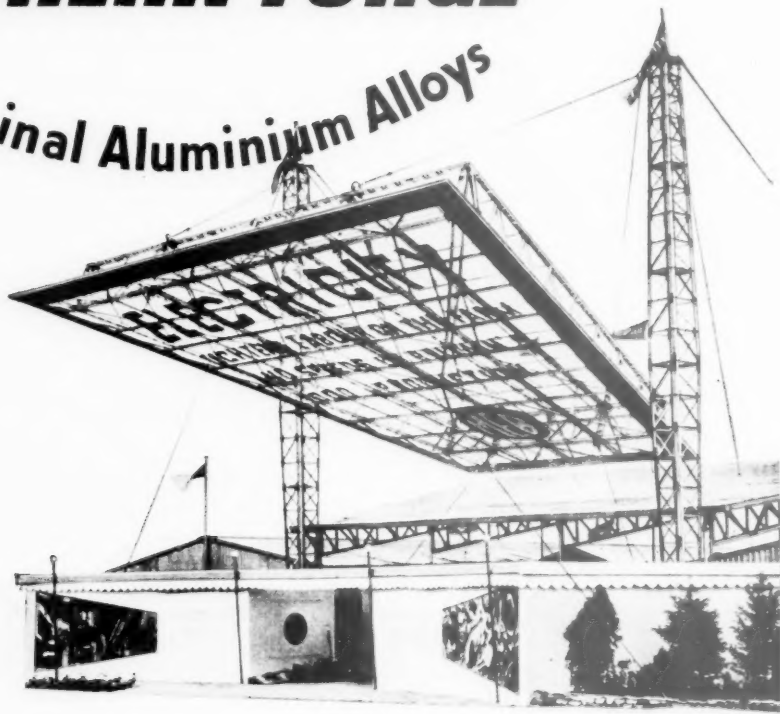
One of many  
illustrations  
from the new  
Casement Catalogue  
just published by

# HENRY HOPE & SONS LTD

SMETHWICK, BIRMINGHAM & 17 BERNERS ST., LONDON, W.1



Extrusions Tubes & Forgings  
**SOUTHERN FORGE**  
 In Alminal Aluminium Alloys



Southern Forge Extrusions were used in the construction of the Midland Electricity Board's Exhibition Stand at a recent Royal Show. It will be seen that the designer took full advantage of the unique characteristics of aluminium alloys—lightness, strength and weather resistance—in this structure built by SMD of Slough.



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## Metal Windows

I HAVE been asking many of my building trade friends for their views on the new width of standard metal windows, which some of the firms are now offering us, as it strikes me it is such a great improvement. The main change seems only to be in regard to the width which is changed from a basic 1ft 8in to approximately 2ft. This change may seem to be relatively small but, in the opinion of most of those I have talked with, it seems well worthwhile as it gives a proportion which is more suited to current architectural ideas. I have not only sought views on this change of width but also on the desirability as to whether B.S.990, which covers this type of window should be changed to the new width and the old width abandoned. There seems no doubt from the many discussions I have had that B.S.990 is very widely used and whatever changes may be made to it, it is almost certain that it will continue to be the basis on which by far the greater part of window production of this class of casement would be called for. It was interesting to learn that many members of the building trade are of the opinion that the issue of B.S.990 raised considerably the quality of metal window production as the less good makers found that, in order to do business, they had to meet the requirements of the standard which made it necessary to come up to the quality of the productions of the better firms.

I am sure that, from a national point of view, we can only obtain the full benefit of economic manufacturing if we have one range of metal windows in any one class which will fulfil the bulk of demand; we should, therefore, think very hard as to whether we continue with the present B.S.990 types, which in any case strike me as being too numerous, or whether we make a break and change to a range based on the new 2ft wide type or even one based on some other dimension. The width dimension is, in my mind, all important and the height dimensions should be adjusted, if necessary, to the agreed width since the heights always present less difficulty as the sill treatments need to vary and can usually be made to accommodate the variations in height.

I should think that the new 2ft unit type is as wide as could be achieved with the metal sections used for this type of window and I doubt that any alternative sections could be devised which would be equally economic. In fact, I am slightly uncertain that any increased width of sashes from those in the present B.S.990 range will be as satisfactory, taking account of the full normal life of a house, but I assume that since this new range appears to have been born through the researches of one or two very well-known firms they would not risk their international reputations without first assuring themselves of the quality of their new venture.

One of the factors which may not, however, have been fully anticipated is the rapid growth of the development of the 3ft 4in unit now being put into practice in several directions—the latest being the "Punt" roof lately illustrated in this Journal. This 3ft 4in unit is also the basis of the modular co-ordination scheme on which committees of both B.S.I. and R.I.B.A. have reported. Neither of these bodies has yet carried the modular scheme to the point at which precise dimensions for any given product can be set down, thus there is a question as to whether it is a good moment to change any established dimensions and whether it might not be wise to wait a little while. Personally I take the view that it is likely to be a long time before the modular scheme is fully worked out and longer still before it can operate very generally so that if there is an immediate opportunity to change a B.S. to something better then it should be taken as soon as the manufacturing facilities can be adjusted.

On full consideration I should like to see B.S.990 changed to the 2ft basis and for a change-over date to be announced. I assume that after the B.S. is agreed, which will no doubt take quite a long time, it would be necessary to give about 12 months' notice to architects and builders that from a given date window deliveries will be to the new sizes and the old sizes will have to be treated as "specials." Something like 12 months' notice seems necessary as the architects will need to take account of the future change when making their drawings. The manufacturers would, I assume, find it very difficult to make the gradual change over but would like to cease duplicate production as soon as they can. Certainly the makers must be given a date after which they can be sure that their patterns and jigs of the old types may be put aside for use only when "specials" are called for.

One person with whom I discussed this subject suggested that windows of the new 2ft unit width might be found to be inconveniently large for many domestic buildings especially for small compartments such as larders. I have tried out the new sizes on a series of housing plans and did not find a single example where there seemed to be any real difficulty in substituting windows of the new range for those of the old.

I have heard in some quarters, a recent R.I.B.A. lecture in particular, that some of the architects would like the British Standards for windows to cover quality only and to omit all references to sizes. This approach is, in my opinion, very wrong as we should then lose the benefits of mass-production of our metal windows for the normal types of economic building. In any case makers will want and, in fact, need to make stock products and at least a part of demand will always be for stock articles as it will come from those who will not bother to design products such as these, so let us have

standard sizes for windows and at the same time let us also try to obtain agreement on a range which is aesthetically as good as we can achieve. This really amounts to saying we know many purchasers will want to take advantage of mass-produced stock windows but as architects we will see that what they get are as good as we can design, realizing that we do not know quite how they will be used.

One point I would like to make for consideration if B.S.990 is changed; can we have a standard pair of doors wider than 3ft 9in measured over the frame, as when one leaf only is opened the available clear space is uncomfortably narrow to pass through. My suggestion is that pairs of doors need to be at least 4ft over the frame and better rather more up to about 5ft and let us keep 2ft 6in for all single doors. May we also omit the type of windows 6ft 6in wide in B.S.990 as the wide centre glass portion cannot be cleaned by the housewife easily from the inside. A slight increase in the width of the opening space provided by the standard "easy-clean" hinge would also be an advantage. Consideration should be given to the inclusion of friction hinges, if one with a long life, without any maintenance whatsoever, can be devised. I presume that vertical pivot hung types need to be treated as something outside the normal standard range of so called "cottage" casements but certainly they have their advantages, even at a higher cost.

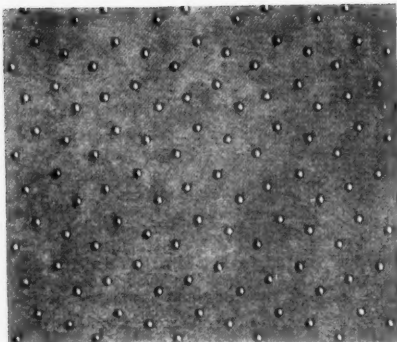
Recently in these notes I remarked on the difficulties of taking furniture into houses and that from time to time this necessitates the removal and reinsertion of whole window frames. When such a necessity may arise it is worth building the windows into wood surrounds such as those covered by B.S.1285 or into metal sub-frames as those covered by B.S.1422 as by using this method of fixing the windows are replaceable without undue damage.

## DUTCH UNCLE

### ANNOUNCEMENT

Mr. R. H. James, who for a number of years has been Chief Payment by Results Adviser at the Ministry of Works, has set up in private practice as a Production Consultant in building and civil engineering work. He will be in partnership with Mr. T. E. Crowley, B.Sc. (who at one time was responsible for building method study at the Department of Scientific and Industrial Research), and with other members of his Section, all of whom are fully qualified by training and experience in the building and civil engineering industries, to give advice on specific production problems.

The firm is operating under the title of R. H. James and Partners at 7, Hobart Place, Westminster, London, S.W.1 (Telephone: Sloane 9860).



#### FINISHES GLASS D1 3.

Designed by Sadie Speight, this glass was first produced this year by a well-known firm. The glass, known as Spotlyte is a figured rolled sheet with overall ribbing and smooth raised spots on the one side and an even smooth face on the reverse. For decorative use varied effects can be obtained depending on the position and direction of lighting.

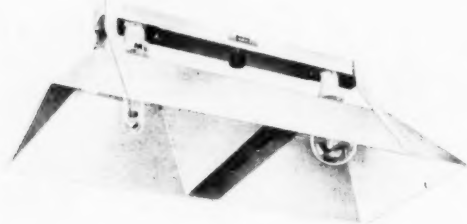


#### FITTINGS CLOAKROOM FITTINGS, ETC. C7 4.

Claimed to be virtually unbreakable, this new toilet seat and cover are in moulded plastic specially selected for its smooth hard surface and resistance to moisture and chemical attack. The seat, known as the 'Jubilee', as well as the cover are fitted with non-porous rubber buffers. The cover has a finger tip lid for easy lifting. Metal parts are reduced to a minimum and all are rust proofed.

The mounting pillars have moulded heads to match the colour of the seat and are adjustable, from 4in centres, to fit any type of pan.

Seat and cover are available in eleven colours.

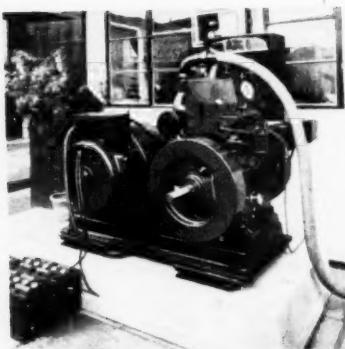


#### SERVICES LIGHTING B1 44.

First used in the turbine house at Oxford generating station this new combined tungsten and mercury lighting fitting takes a mercury lamp (250 watt or 400 watt) and a tungsten lamp (500, 750 or 1,000 watt).

In the turbine room at Oxford the fittings each house a 250-watt mercury lamp and a 500-watt tungsten lamp and are mounted at a height of 35ft in a room 96ft x 54ft.

Six fittings give 11 lumens per sq ft at turbine floor level.



#### PLANT GENERATORS E13 1.

This photograph, taken at the recent B.I.F., shows one of a number of diesel-operated generating sets which were on view.

A new model, similar to this 7 Kva type was the 6 Kva fully automatic 230-400 volt three-phase machine.

The sets were fitted with vibro insulators under the base plates. There were no bolts to hold the machines down to foundations.

The set illustrated incorporates a Ruston engine running at 1,200 r.p.m. and the vibro insulators can be seen in the picture.

### MOSAICS

The names and addresses of manufacturers of any item illustrated in MOSAICS, together with more detailed information relating to their products—including price and availability—will be forwarded to readers on request.

Letters should quote the serial number and be addressed to :

The Editor,  
The Architect and Building News,  
Dorset House,  
Stamford Street, S.E.1.

Please mark the envelope MOSAICS.

#### In Parliament

continued from page 78.

of flats on the Moredon Estate, Swindon, and elsewhere, owing to his department's regulations, what he was doing to remedy the defect. Mr. Marples, the Parliamentary Secretary, replied that this matter was not covered by regulations. In this case, as in others, the Ministry's officers and the local authorities had been in consultation to find a remedy, but this was not easy. The whole subject was under examination with the help of the Building Research Station. (July 8.)

#### Softwood Control

Sir Waldron Smithers asked the Secretary for Overseas Trade, as representing the Chancellor of the Duchy of Lancaster, if, in view of the opinion of leading merchants and organizations in the softwood section of the wood trade that the supply of softwood was in excess of demands, he would remove all controls in the buying and selling and use of softwood. Mr. Mackeson said "No." Balance of payments difficulties made it necessary to restrict the import, and therefore the use, of softwood, practically all of which came from non-sterling sources. (July 10.)

#### Foreign Bricks

Mr. P. Maitland asked the President of the Board of Trade whether he would prevent foreign bricks being imported for housebuilding when stone was available, mentioning that recently an order for about £40,000 worth of bricks went to Belgium from Dundee, where there was enough stone available in a declining industry which would have met the need. Mr. Thorneycroft thought it would not be practicable or desirable to relate import of bricks to the availability of stone. Imports amounted to less than one-sixth of one per cent of home production, and he could not hope to go on selling large quantities of manufactured consumer goods in Western Europe if we restricted imports more than the balance of payments made absolutely necessary. (July 10.)

## CURRENT MEASURED RATES (LONDON)

These apply to new work of normal character and some size. The rates are for time and materials only, and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing tables which carried up to the 1st of July, 1952.

## [COPYRIGHT]

## ESSENTIAL ON-COSTS

|   |                           |
|---|---------------------------|
| Fees payable to L.C.C. for District Surveyor:   |                           |
| For new buildings of ordinary construction exceeding 5,000 cubic feet, for every 1,000 feet or part of same up to 1,000,000 cubic feet 1/6, | £1 10/-                   |
| together with an additional sum of £1/10/-  | at + 1/6                  |
| After which allow per 1,000 do.   | at + 9d.                  |
| For alterations and additions:  |                           |
| When £100 the sum of £2/10/-, plus 12/6 for every £100 or part of same, up to £1,000  | £2 10/- at + 12/6 per 100 |
| When over £1,000 the sum of £8 2/6, and for every £100 or part of same beyond 3/-   | £8 2/6 at + 3/- per 100   |
| Public buildings: Fees as above but plus 50%.   | + 50%                     |
| Fees in respect of means of escape in case of fire are 1/5th of the above or £2 if greater or in the case of a one-storey building £1       | 1/5th                     |
| Steel framed or r.c. buildings double   | + 2                       |

|  |         |
|--|---------|
| Allowance to cover National Insurances, Holidays with Pay and Public Holidays, Welfare, Third Party Risk, Travelling and Guaranteed Week is made in the rates attached to the items. |         |
| Allow for Fire Insurance do.   | 1/6     |
| Allow for Water for use on the works and apparatus do.   | 1/6     |
| Allow for hoarding, or similar licences in City of London say £10 Do. under Borough Councils per ex month.   | say 2/6 |
| Allow for Office, Fire, Attendance on C. of W. etc., p. week say £1  |         |

|   |  |
|---|--|
| Supervision, etc. assessment Contract value                               |  |
| Cost of admin. .. 6% .. 5% .. 5% .. 4 1/2% .. 4 1/2%                      |  |
| Agent or foreman .. 5% .. 4 1/2% .. 3 1/2% .. 2 1/2% .. 1 1/2%            |  |
| (each) .. 2 1/2% .. 2 1/2% .. 1 1/2% .. 1% .. 1/2%                        |  |
| Timekeeper or Watchman (each) .. 2 1/2% .. 2 1/2% .. 1 1/2% .. 1% .. 1/2% |  |

|  |              |
|--|--------------|
| SPOT ITEMS AND DEMOLITION, ETC.  | Per foot run |
| Hoarding erected and removed .. .. .   | 15/-         |
| Planked gangway with handrail, etc. do. .. .   | 8/-          |
| Proper gantry do. .. .. .  | 60/-         |
| Sleeper roadways .. .. .   | 12/6         |
| Needling, strutting and shoring including all labours Per foot cube and use and waste in erection and removal .. . | 15/-         |
| Breaking up and removing hard masses of concrete Per yard cube or brickwork, etc., found in foundations .. .. .    | 50/-         |

|  |                |                |      |          |
|--|----------------|----------------|------|----------|
| ALTERATION-DEMOLITION—   | 1              | 1 1/2          | 2    |          |
| Cutting out cement concrete or brickwork in small quantities ..                              | Per foot super | Per foot super | Cube | Per yard |
| Do. if either in very small quantities or reinforced .. .. .                                 | 1.1            | 2-             | 2.10 | 50/-     |
| Debris into baskets and removed from inside to outside of bldg. 3 1/2d. 5 1/2d. 7 1/2d. 10/6 |                |                |      |          |

|                                     |         |          |          |  |
|-------------------------------------|---------|----------|----------|--|
| SCAFFOLDING                         | Period— |          |          |  |
| Per Yard superficial                | 1 month | 3 months | 5 months |  |
| Putlog type—4' 6" lift .. .. .      | 3/6     | 5/4      | 7/2      |  |
| Do. —6' 0" do. .. .. .              | 2/9     | 4/3      | 5/9      |  |
| Independent type—4' 6" lift .. .. . | 4/7     | 7/4      | 10/7     |  |
| Do. —6' 0" do. .. .. .              | 3/6     | 5/7      | 7/8      |  |

|  |             |               |            |             |
|--|-------------|---------------|------------|-------------|
| EXCAVATION   | Common Soil | Loam and Clay | Stiff Clay | Hard Gravel |
| Per Yard Cube. By hand .. .. .                                 | 4/-         | 4/4           | 5/1        | 6/2         |
| Reduce levels .. .. .  | 7/2         | 8/10          | 11/4       | 12/2        |
| Surface trench .. .. .   | 2/2         | 2/10          | 3/3        | 2/2         |
| Barrow 25 yds. .. .. .   | 2/2         | 2/6           | 3/3        | 2/2         |
| Fill and ram .. .. .   | 12/8        | 12/11         | 13/5       | 12/8        |
| Load and cart .. .. .  |             |               |            |             |
| By machine .. .. .   |             |               |            |             |
| Bulk dig and load .. .. .                                      | 2/9         | 3/-           | 3/6        | 3/6         |
| Lorry standing while loading and 5 miles travel to tip .. .. . | 4/10        | 5/2           | 5/10       | 5/8         |
| 1 extra mile to tip .. .. .                                    | 6 1/2d.     | 7 1/2d.       | 8 1/2d.    | 7 1/2d.     |

|  |                            |               |
|--|----------------------------|---------------|
| CONCRETE   | 1 1/2 in Ballast Aggregate | Per yard cube |
| 1 : 3 : 6 Cement concrete in foundations .. .. . |                            | 65/-          |
| Do. around grillages .. .. .                     |                            | 67/-          |

## REINFORCED CONCRETE

|   |                |
|---|----------------|
| 1 : 2 : 4—1 in. concrete, worked around reinforcement, between formwork in the following (at various levels): |                |
| Foundations and surface beds .. .. .  | 73/- Per cubic |
| Walls, 12 ins thick or more .. .. .   | 82/- Yard      |

|  |                    |                      |                         |
|--|--------------------|----------------------|-------------------------|
| Sectional inches.                            | Lintols and beams. | Columns and casings. | Braces and projections. |
| Up to 36 .. .. .                             | 3/10               | 4/1                  | 4/3 Per cubic ft        |
| 36 to 72 .. .. .                             | 3/9                | 4/-                  | 4/2 do.                 |
| 72 to 144 .. .. .                            | 3/8                | 3/10                 | 4/- do.                 |
| over 144 .. .. .                             | 3/6                | 3/9                  | 3/11 do.                |
| Walls 6 ins thick .. .. .                    |                    |                      | 15/6 Per super yard     |
| Do. 9 ins thick .. .. .                      |                    |                      | 24/- do.                |
| Suspended floors average 6 ins thick .. .. . |                    |                      | 16/3 do.                |

| REINFORCING RODS (round) bent and placed— |      |          |      |          |
|---|------|----------|------|----------|
| Per cwt.                                  | 1 in | 1 1/2 in | 2 in | 2 1/2 in |
| In floors and beams .. .. .               | 68/- | 63/-     | 59/- | 53/-     |
| In walls .. .. .                          | 74/- | 68/-     | 62/- | 56/-     |
| In columns .. .. .                        | 80/- | 73/-     | 67/- | 60/-     |

|                                      |        |        |                     |
|--------------------------------------|--------|--------|---------------------|
| FORMWORK and Supports (4 times use)— |        |        |                     |
| Floor soffits                        | Beams. | Walls. | Columns.            |
| 16/3 per Yard.                       | 2/2    | 2/-    | 2/2 per super foot. |

## BRICKWORK

|  |                         |
|--|-------------------------|
| BRICKWORK per YARD superficial reduced to ONE BRICK in thickness (scaffold to add)—  | In 1 : 3 cement mortar. |
| Flettons or other similar at 105/3 per 1,000 .. .. .   | 34/3                    |
| Mild Stocks or do., at 208/- per 1,000 .. .. .   | 47/-                    |
| Second Stocks or do., at 233/- per 1,000 .. .. .   | 49/7                    |
| Southwater engineering or similar bricks, at 305/- per 1,000 .. .. .   | 57/6                    |
| Blue Staffordshire wire cut at 434/6 per 1,000 .. .. .   | 70/9                    |
| Deduct if 1 : 1 : 6 Cement-Lime mortar is used in lieu of 1 : 3 Portland Cement mortar .. .. .                             | 2d.                     |
| Add if brickwork commences above ground level Do. if in backing to masonry including cutting and waste for bonding .. .. . | 3/-                     |
| Do. If circular-on-plan .. .. .  | 2/6                     |
| Do. If in underpinning .. .. .   | 6/-                     |

## BRICKWORK IN THICKNESSES NOT REDUCED—

|  |                       |            |  |                               |
|--|-----------------------|------------|--|-------------------------------|
| Per yard superficial.  | Brick, on edge walls. | Half-Brick | 1 Brick finished with 2" fair both cavity and sides. | 11" Hollow with 2" G.I. tica. |
| In Flettons or similar .. .. .   | 14/4                  | 18/3       | 36/-   | 39/-                          |
| In second stocks or do. .. .. .  | 20/-                  | 26/3       | 52/-   | 55/-                          |
| Add: for pointing as work proceeds, per side .. .. .   | 1/3                   | 1/3        | 1/3  | 1/3                           |
| Thickenssing to old walls, including cutting, toothing and bonding to same an average total thickness of 1 1/2 brick .. .. . | 46/-                  | 56/-       | Per yard super.                                      |                               |
| Do. all as last but an average total thickness of 1 1/2 bricks .. .. .   | 63/-                  | 80/-       |  |                               |

## WALLS BUILT IN SUPERIOR BRICKS—

|  |            |           |          |
|--|------------|-----------|----------|
| In 1 : 3 Cement mortar, fair faced and pointed on both sides as the work proceeds :— |            |           |          |
|  | Half-Brick | One Brick |          |
| In first quality Stocks at 243/- ..  | 30 4       | 55/-      | Per yard |
| In red facings at 260/- ..   | 30 -       | 53 4      | super.   |
| In bluepressed facings at 455/- ..   | 44 6       | 80 6      | do.      |

## GENERAL AND SUNDRY—

|  |                              |
|--|------------------------------|
| Cut tooth and bond new brickwork to old .. .. .  | 3/9 per ft                   |
| Damp proof course, double slate, horizontal .. .. .  | 2/6 super.                   |
| Do., as last, but vertical .. .. .   | 3/2 do.                      |
| Do., bitumen, Hessian base, do. .. .. .  | 1/- do.                      |
| Frames, bed and point in cement mortar, one side 4d. per ft run  |                              |
| Window board of 6" x 6" x 1/2" rounded on edge quarry tiles, bedded, pointed, cut and fitted .. .. .                             | 2/6 do.                      |
| Terra cotta air bricks built in and 9" x 6" 9" x 9" pointed, including flue .. .. .  | 7/6 each.                    |
| Chimney pots, plain red, set and flanchued in cement mortar .. .. .  | 1ft high 2ft high 17/6 each  |
| Metal windows, assembled, hoisted and fixed, lugs cut and pinned and frames bedded and pointed one side in cement mortar .. .. . | Up to 5ft 5ft to 10ft super. |
| Leaving holes through walls for Small pipes pipes and afterwards making good .. .. .   | 8/10 10ft to 20ft super.     |
| Cutting do., and afterwards do. .. .. .  | 17/6 31/- each               |
| Cut mortices in brickwork or concrete for bolts or dowels and run in with cement grout in depth, each                            | 1/- per in                   |
| Holdfasts of stout hoop iron bent hold and screwed to frame and built in .. .. .   | 1/- each                     |

## MEASURED RATES.

## BRICKWORK—Continued

## FACING—

Extra only over common brickwork (105/3 per 1,000) for facing with superior bricks in *Flemish bond* and pointing as the work proceeds.

|                               |       |                 |
|-------------------------------|-------|-----------------|
| Rustic Flettons (130/3) .. .. | 3 11  | per yard super. |
| White (180/-) .. ..           | 6 11  | do.             |
| First Stocks (243/-) .. ..    | 11 7  | do.             |
| Reds (260/-) .. ..            | 12 11 | do.             |
| Blue pressed (481/-) .. ..    | 29 3  | do.             |

If built in English bond, Add 10% to above.

If do. half-brick stretcher bond, Less 25% off above.

## COPING—

All labour and material in forming brick-on-edge coping with two courses of roofing tiles under and cement weather fillets on both sides, built in cement and pointed as the work proceeds.

| Per foot run                    | 9" thick         | 14" thick |
|---------------------------------|------------------|-----------|
| In picked Flettons .. ..        | 4/-              | 6/-       |
| In first quality Stocks .. ..   | 4 8              | 7/-       |
| In red facings .. ..            | 5 2              | 7/-       |
| Plumbing angles .. ..           | 2d. per foot run |           |
| Fair cutting .. ..              | 9d.              | do.       |
| Fair raking cutting .. ..       | 1/3              | do.       |
| Fair circular cutting .. ..     | 1/3              | do.       |
| Fair squint or birdsmouth .. .. | 1/6              | do.       |

## ARCHES

|  |            |      |
|--|------------|------|
| Extra over Fletton brickwork for forming window head with red facing bricks set on end and with 4½" soffits and pointing .. .. | foot run   | 2 6  |
| Do. for rubbed and gauged flat arch in red rubbers set in putty with fine joints .. ..   | foot super | 15/- |

## PARTITIONS

|   | Per yard super— |
|---|-----------------|
| (over 100 Yards)  | 2in 2½in 3in    |
| Concrete slab partitions in cement mortar                   | 8 4 9 8 10 8    |
| Hollow terra-cotta, do. .. ..                               | 10 6 11 6 12 8  |
| Cutting and bonding at angles, intersections and ends .. .. | 4d. foot run.   |

## PAVING

|  | 1in 1½in 1¾in | yard super |
|--|---------------|------------|
| Grano trowelled gauged 5:2                   | 6 9 8 2       | 9 7        |
| 1 x 5in skirting, square top and cove bottom | 2/-           | foot run   |
| ½in x 6in red quarry tile paving .. ..       | 24/-          | yard super |
| ½in x 6in do. skirting .. ..                 | 1/6           | foot run   |
| Jointless flooring, ½in thick .. ..          | 20/-          | yard super |

## ASPHALTE (normal conditions and fair quantity)

| ½in pitch mastic floor in one coat on felt underlay on prepared concrete base    | 1450/48      | 1375 47   |
|--|--------------|---|
| Per yard super .. ..   | Black 10/9   | Brown 11/10<br>Mastic B.S.988<br>Red 12 8<br>Natural Rock |
| Unit   |              | B.S.S. 1162/44  |
| ½in. in two thicknesses on felt underlay on prepared concrete base .. ..         | yard super   | 14/- 19/-   |
| Ditto in narrow widths .. ..   | foot super   | 1 9 2 4   |
| ½in skirting 6in high, angle fillet at bottom splayed and turned in at top .. .. | foot run     | 2/- 2 3   |
| External angles .. ..  | each         | 4½d 4½d   |
| Internal ditto .. ..   | each         | 8d. 8d.   |
| Tanking or Damp Course   | B.S.1097/43  | B.S.1418 47   |
| Vertical in two thicknesses  | yard super   | 18/- 23 6   |
| ½in horizontal ditto .. ..   | yard super   | 12/- 18 6   |
| Vertical in three thicknesses  | yard super   | 23/- 31/-   |
| 1½in horizontal ditto .. ..  | yard super   | 17 8 28/-   |
| Labour rounded external angle .. ..  | per foot run | 4d. 4d.   |
| Ditto internal angle fillet .. ..  | per foot run | 7d. 7d.   |
| Ditto double ditto .. ..   | per foot run | 1/1 1/1   |
| Collars to small pipes .. ..   | each         | 2/8 3/2   |
| Ditto to large pipes .. ..   | each         | 4 9 5 6   |

## DRAINAGE

| Per lineal yard  | 1 foot in depth .. | 3/10  |
|--|--------------------|-------|
| Excavate trench, and plank and strut to sides, consolidate bottom to fall, return fill and ram earth after drain is laid, and load and remove surplus. In ordinary ground moderately firm. | 2 do. ..           | 6 6   |
|  | 3 do. ..           | 16 4  |
|  | 4 do. ..           | 21 8  |
|  | 5 do. ..           | 27/-  |
|  | 6 do. ..           | 34 3  |
|  | 7 do. ..           | 41 9  |
|  | 8 do. ..           | 52 11 |
|  | 9 do. ..           | 61 6  |
|  | 10 do. ..          | 68/-  |
|  | 11 do. ..          | 84 9  |
|  | 12 do. ..          | 95 5  |

| Portland cement (1:6)              | Per yard run        |
|------------------------------------|---------------------|
| concrete bed under drain           | 4in 6in 9in         |
| pipes and benching up on 18in wide | 20in wide 23in wide |
| both sides .. ..                   | 5 6 6/5 8/-         |

## SALT GLAZED SANITARY DRAIN PIPES

and lay and joint with Yarn and Cement Mortar in trench.

| Quality                         | Quantity                                      | Per foot run        |
|---------------------------------|---|---------------------|
|                                 |   | 4in 6in 9in         |
| "Best" .. ..                    | 2 Tons or more over 100 pieces                | 2 4 3 5 5/8         |
|                                 | under 100 ditto                               | 2 6 3 9 6/2         |
| "Best Tested" .. ..             | 2 Tons or more over 100 pieces                | 2 7 3 11 6/5        |
|                                 | under 100 ditto                               | 3 4 4 11 7/3        |
| "British Standard" .. ..        | 2 Tons or more over 100 pieces                | 3 3 4 11 8/-        |
|                                 | under 100 ditto                               | 3 4 5/- 8 5         |
| "British Standard Tested" .. .. | 2 Tons or more over 100 pieces                | 2 6 3 9 6/2         |
|                                 | under 100 ditto                               | 2 9 4/- 6 8         |
| Extra for bends "Best" .. ..    | 2 Tons or more over 100 pieces                | 2 10 4 2 7/-        |
|                                 | under 100 ditto                               | 3 1 4 7 7 8         |
| Extra for junction "Best" .. .. | 2 Tons or more over 100 pieces                | 3 4 5/- 8 5         |
|                                 | under 100 ditto                               | 3 6 5 3 8 10        |
| Extra for bends "Best" .. ..    | Contained in 2 Ton lots.                      | 3 8 5 5 15 4        |
| Extra for junction "Best" .. .. | —(4in on 4in., 6in. on 6in.,—9in. on 9in.) .. | ditto. 5 9 8 5 25/- |

## IRON DRAIN PIPES—

| Heavy cast iron socketed and laying and jointing in molten lead—  | Per foot run |
|---|--------------|
| In main runs .. ..  | 4in 6in      |
| In branches .. ..   | 9- 13 6      |
|   | 9 5 13 11    |
| each  |              |
| Extra over last for bends and extra joint ..  | 30- 51/-     |
| Do. on do. for junctions and extra joint ..   | 41- 73/-     |
| Cast iron gully with 10½in inlet and 4in outlet, composed of hooper and trap, and 9in extension piece and 10½in grating, and jointing all together, and jointing to drain and surrounding in concrete .. .. | 110.-        |
| Do. rain water shoe with vertical inlet and inspection cover, and joint up and embed ..   | 51/- 100/-   |

## MANHOLE SUNDRIES—

|  | 4in 6in       |
|--|---------------|
| Salt glazed straight half-round main channels .. ..                            | each 4/6 6/3  |
| Do. curved .. ..   | do. 9 9 14 6  |
| Do. three-quarter section splayed channel bends (Barrons or similar) ..        | do. 11/3 16/6 |
| Heavy manhole steps galvanized .. ..   | do. 9 6       |
| Fix only manhole covers .. ..  | do. 8/-       |
| 4in Mica flap, brass faced, f.a.i. valves and fix with molten lead joint .. .. | do. 30/-      |

## ROOFER

## CORRUGATED ASBESTOS SHEETS

|   |                  |
|---|------------------|
| P.C. 5 8 per super yard, including side and end laps and fixing to wood .. ..   | 115/- per square |
| Eaves filler pieces .. ..   | 1/7 foot run     |
| Adjustable ridge .. ..  | 2/11 do.         |
| Barge boards .. ..  | 2/3 do.          |
| Plain roofing tiles, machine made, sand faced, 4in gauge nailed every 4th course with 1½in galvanized nails, to battens (measured separately) .. .. | 205/- do.        |
| Extra over last for top edge or abutment cutting ..   | 1 0½ do.         |
| Do. for double course at eaves .. ..  | 1 10 do.         |
| Do. for verges, undercloak, bed and point ..  | 2 8 do.          |
| Do. Valley tiles including cutting and waste on both sides .. ..  | 9/- do.          |
| Do. Bonnet hips and do. bed and point .. ..   | 10/- do.         |
| Half-round ridge and bed and point .. ..  | 2 6 do.          |
| Fixing soakers .. ..  | 1/3 dozen        |

Bituminous felt roofing in two layers, laid breaking joint and bedded with hot mastic and finished with fine dry grit .. ..

|                                 |                   |
|---------------------------------|-------------------|
| Do. but in one layer only .. .. | 8/6 { yard super. |
|                                 | 6/4 {             |
|                                 | Per square        |

## WELSH SLATING—

|   |                               |
|---|-------------------------------|
| 3in lap, 2 zinc nails to each slate .. .. | 12" x 10" 18" x 10" 20" x 10" |
|   | 261- 275- 310/-               |

## Additional labours—

|  | Per foot lineal— |
|--|------------------|
| At tops, verges and abutments—straight | 1/3½ 1 14 1 6½   |
| Do. raking .. ..                       | 1 11½ 2 0½ 2 4   |
| At hips and valleys (each side) .. ..  | 1 11½ 2 0½ 2 4   |
| At eaves, double course .. ..          | 2 8 2 9 3 1      |
| Do. to falls .. ..                     | 3 7 3 10 4 3     |



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## MEASURED RATES—Continued

## FLOORS AND FLATS

| Hollow tile in situ or precast units hoisted, bedded and fixed— |          | Span—   |         |
|---|----------|---------|---------|
| Superimposed load   |          | 12 feet | 16 feet |
| in lb per foot super.   |          | 39 6    | 43 6    |
| Per yard super.   | { 50 ..  | 39 6    | 43 6    |
|   | { 100 .. | 40 6    | 46 —    |
|   | { 150 .. | 43 —    | 49 —    |

20 lb has been allowed to cover dead load in surface finish  
Fair edge to slabs .. .. 6d. per foot run  
Splay cutting and waste .. .. 1/6 do.

## CARPENTER AND JOINER

| Softwood at min. control cost.         |  | per foot cube— |         |         |
|--|--|----------------|---------|---------|
| Labour, materials, waste nails, Plates |  | Joists         | Rafters | Trusses |
| hoisting and fixing .. 15 3            |  | 15 9           | 16 9    | 19 9    |

| FLOORING—   | Per square— | 1/2 in | 1 in  | 1 1/2 in |
|---|-------------|--------|-------|----------|
| Rough boarding .. ..  | 122 —       | 152 —  | 186 — |          |
| Softwood batten flooring, straight joints, splayed headings .. .. | 124 —       | 155 —  | 190 — |          |
| Do. grooved and tongued .. ..                                     | 145 —       | 179 —  | 223 — |          |

| SKIRTING—  | Per foot superficial— | 1/2 in | 1 in | 1 1/2 in |
|--|-----------------------|--------|------|----------|
| Wrot softwood moulded skirting with grounds and backings plugged .. .. | 3 2                   | 3 9    | 4 3  |          |
| Mitres to do. .. 3d. per sectional inch.                               |                       |        |      |          |
| Fitted ends .. 2d. do.   |                       |        |      |          |

## SASHES, Fanlights, casements, borrowed lights, etc.—

| Per foot super—                               |     | Without bars | With bars (2ft sup. in each square) |
|---|-----|--------------|-------------------------------------|
| 2in softwood rebated, moulded and fixed .. .. | 2 9 | 4 7          |                                     |
| Add if fitted with beads .. ..                | 6d. | 1 6          |                                     |
| Add if hanging on butts .. ..                 | 2 — | each         |                                     |

## WINDOWS, hung on lines—

| Softwood cased frames, 1in inner and outer linings, 1 1/2 in pulley styles, 2in sashes, oak sill. |      | Overall size of frames— |      |      |      |
|---|------|-------------------------|------|------|------|
| Per foot super.   |      | 6ft                     | 21ft | 32ft | 44ft |
| Window as described .. ..   | 15 6 | 8 —                     | 6 4  | 5 —  |      |
| Add if sashes in squares, about 2 feet super in each .. ..  | —    | 1 3                     | 1 7  | 1 6  |      |
| Extra for hanging sashes with lines, weights and axle pulleys .. ..                               | 25 — | 42 —                    | 52 — | 70 — |      |

## FINISHINGS TO OPENINGS—

| Softwood linings, tongued at angles and tongued to frame including grounds and backings .. ..                       |  | 1/2 in | 1 in      | 1 1/2 in | 1 1/2 in |
|---|--|--------|-----------|----------|----------|
| Add if crosstongued .. ..   |  | 3 2    | 3 6       | 4 3      | 4 8      |
| Softwood wrot rounded on front edge and with tongue at back window board including groove in sill and bearers .. .. |  | 6d.    | 6d.       | 6d.      | 6d.      |
| Add for ends to last notched, returned and rounded .. ..  |  | 3 1    | 3 6       | 4 3      | 4 9      |
| Add for ends to last notched, returned and rounded .. ..  |  | 10d.   | 10 1/2 d. | 11d.     | 1 —      |

| Per foot run—   |  | Sectional area in inches— |          |          |          |      |     |
|---|--|---------------------------|----------|----------|----------|------|-----|
| Softwood wrot and fixed in bearers, backings, grounds, fillets, and similar .. .. |  | 1                         | 2        | 3        | 4        | 5    | 6   |
| Add if in short lengths .. ..   |  | 3d.                       | 5 1/2 d. | 7 1/2 d. | 9d.      | 11d. | 1 1 |
| " if plugged to brickwork .. ..   |  | 2d.                       | 2d.      | 2 1/2 d. | 2 1/2 d. | 3d.  | 3d. |
| " if framed as in legs and bearers .. ..  |  | 4d.                       | 4d.      | 4d.      | 4d.      | 4d.  | 4d. |
| " if rebated or grooved or beaded .. ..   |  | 3d.                       | 3d.      | 4d.      | 4d.      | 6d.  | 6d. |
| " if chamfered or rounded edges .. ..   |  | 1d.                       | 1d.      | 1d.      | 1d.      | 1d.  | 1d. |
| " if moulded in ar-hitraves, capping, etc. .. ..                                  |  | 1d.                       | 1d.      | 1d.      | 1d.      | 1d.  | 1d. |

## DOOR FRAMES—

| Per sectional inch—                                     |  | 6in | 8in  | 10in | 12in | 13 1/2 in |
|---|--|-----|------|------|------|-----------|
| Softwood, wrot, rebated, rounded framed and fixed .. .. |  | 1 7 | 1 10 | 2 1  | 2 5  | 2 7 1/2   |

## DOORS—Per foot super.

| 2in Softwood, square framed and flat panels, both sides, on butts .. .. |  | 1    | 2   | 3   | 4   | 5   | 6   |
|---|--|------|-----|-----|-----|-----|-----|
| 1 1/2 in do. .. ..  |  | 3 11 | 4 9 | 5 2 | 5 6 | 5 9 | 6 3 |
| Add for each side .. ..   |  | 4d.  | 5d. | 6d. | 7d. | 8d. | 9d. |
| Add for do. flush panelled .. ..  |  | 8d.  | 8d. | 8d. | 6d. | 7d. | 7d. |

| per foot super—                              |  | 3/4 in | 1 in | 1 1/2 in | 1 1/2 in |
|--|--|--------|------|----------|----------|
| In shelves, table tops, wrot and fixed .. .. |  | 1 10   | 2 1  | 2 6      | 3 —      |
| Do. in divisions and ends framed .. ..       |  | 2 1    | 2 4  | 2 9      | 3 3      |
| Add if crosstongued .. ..                    |  | 6d.    | 6d.  | 6d.      | 6d.      |
| Add if buttoned .. ..                        |  | 6d.    | 6d.  | 6d.      | 6d.      |

## SUNDRIES—Per foot run

| In short lengths  |  | In long lengths | Add for cups & screws |
|---|--|-----------------|-----------------------|
| Glazing beads, mitred around and fixed with brads .. .. |  | 6d.             | 4d.                   |
| Rounded heel or hollow .. ..                            |  | 4d.             | 4d.                   |
| Tongued and grooved angle .. ..                         |  | 6d.             | 6d.                   |
| Glue blocking .. ..                                     |  | 6d.             | 6d.                   |
| Mitres .. ..  |  | 3d.             | per sectional inch.   |
| Fitted ends .. ..                                       |  | 2d.             | do.                   |

## STAIRCASE—

| 1 1/2 in Softwood treads with moulded nosings, risers tongued both edges and glued, blocked and bracketed on and including two fir framed carriages .. .. |  | 1 in | Per ft. super |
|---|--|------|---------------|
| Do. but in winders .. ..  |  | 4 3  |               |
| 1 1/2 in crosstongued landing on framed carriages .. ..   |  | 4 5  |               |
| 2in moulded string .. ..  |  | 4 3  |               |
| 2in do. ramped .. ..  |  | 8 6  |               |
| Ends framed to newel .. ..  |  | 8 —  | each          |
| Tongued and mitred angles .. ..   |  | 4 —  | do.           |
| Tongued heading joints .. ..  |  | 4 —  | do.           |
| Ends of treads and risers housed to string .. ..  |  | 2 3  | do.           |
| Extra for curtail ends to steps, glued up and veneered riser and solid blocking .. ..   |  | 80 — | do.           |

| Balusters about 2ft 9in long, square and 1in framed each end .. .. |  | 1 1/2 in | 1 1/2 in |
|--|--|----------|----------|
| 3 1/2 in x 3 1/2 in square newel, framed .. ..                     |  | 3 3      | 3 6      |
| Mahogany moulded handrail (3in x 2 1/2 in) .. ..                   |  | 7 —      | do.      |
| Do. ramped .. ..   |  | 12 6     | do.      |
| Do. wreathed .. ..   |  | 25 —     | do.      |
| Ends framed to newels .. ..  |  | 6 —      | each     |
| Joints and handrail screws .. ..                                   |  | 8 —      | each     |

## FIXING ONLY IRONMONGERY

| To deal                           |  | To hardwood |
|-----------------------------------|--|-------------|
| Barrel bolts .. ..                |  | 1 5 — each  |
| Flush bolts .. ..                 |  | 3 3 — do.   |
| Sash fasteners .. ..              |  | 1 10 — do.  |
| Rim locks and furniture .. ..     |  | 4 6 — do.   |
| Mortice locks and do. .. ..       |  | 8 9 — do.   |
| Cupboard locks .. ..              |  | 2 3 — do.   |
| Casement fasteners .. ..          |  | 1 10 — do.  |
| Do. stays .. ..                   |  | 1 10 — do.  |
| Grip handles .. ..                |  | 2 2 — do.   |
| Spring catches .. ..              |  | 1 10 — do.  |
| Cabin hooks .. ..                 |  | 1 5 — do.   |
| Floor springs including oil .. .. |  | 39 — do.    |
| Overhead springs .. ..            |  | 11 — do.    |
| Springhinges .. ..                |  | 9 — do.     |

## SMITH AND FOUNDER

| Basis framed steel joists and hoist and fix .. ..   |  | 66/- per cwt.                  |
|---|--|--------------------------------|
| Do. but in compound girders .. ..   |  | 68/- do.                       |
| Do. but in stanchions .. ..   |  | 75 — do.                       |
| Trusses .. ..   |  | 90 — do.                       |
| Additional cost per cwt. over basic sections for following R.S.J.s.   |  |                                |
| 9in x 7in .. 3 1/2 d. per cwt.  |  | 6in x 3in .. 4 1/2 d. per cwt. |
| 5in x 3in, 10in x 8in, 12in x 8in, 14in x 8in, 16in x 8in, 18in x 6in, 18in x 7in, 20in x 6in, 20in x 7in .. .. |  | 6 1/2 d. do.                   |
| 5in x 2 1/2 in, 22in x 7in .. ..  |  | 10d. do.                       |
| 4in x 3in, 24in x 7 1/2 in .. ..  |  | 1 1 1/2 d. do.                 |
| 3in x 3in .. 1 1/4 d. cwt. .. 4 1/2 in 1 1/2 in .. ..   |  | 2 9 d. do.                     |
| 3in x 1 1/2 in .. ..  |  | 3 10 1/2 d. do.                |
| Bolts and nuts, fitted .. ..  |  | 130 — do.                      |
| Forged straps .. ..   |  | 100 — do.                      |
| Wrot iron balustrade .. ..  |  | 115 — do.                      |

## RAINWATER GOODS—

| Round cast-iron pipe with socketed joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance .. .. |  | 2in | 3in | 4in  |
|--|--|-----|-----|------|
| pieces to plugs in brickwork .. ..   |  | 3 — | 3 7 | 4 7  |
| Extra for shoes .. ..  |  | 4 9 | 6 — | 8 6  |
| Do. junctions .. ..  |  | 7 — | 9 — | 13 — |
| Do. bends .. ..  |  | 5 6 | 7 — | 9 6  |

## RAINWATER GUTTERS

| Per foot run—4in  |  | 5in  | 6in |
|---|--|------|-----|
| Half round C.I. gutters jointed in red lead and bolted and fixed on iron brackets .. .. |  | 3 —  | 3 7 |
| Ogee do. All as last .. ..  |  | 3 4  | 3 9 |
| Extra for stop ends .. ..   |  | 2 10 | 3 6 |
| Do. angles or outlets .. ..   |  | 5 —  | 6 4 |

## MEASURED RATES—Continued

## PLUMBER

| EXTERNAL—                      |       | Soakers |      | Flats |       | Flashings |       |
|--------------------------------|-------|---------|------|-------|-------|-----------|-------|
| 4lb Milled Sheet lead per cwt. |       | 203/-   |      | 232/- |       | 241/-     |       |
| Per foot run                   |       | 4in     | 4in  | 4in   | 4in   | 4in       | 2in   |
| Lead main                      | Fixed | 6/-     | 8/7  | 11/9  | 15/2  | 19/6      | 26/11 |
| Ditto service                  | with  | 5/6     | 7/4  | 9/8   | 12/3  | 15/5      | 21/1  |
| Ditto waste                    | tacks | 3/6     | 4/9  | 6/-   | 9/-   | 10/7      | 12/3  |
| Bends                          |       |         |      |       | 1/9   | 3/-       | 7/9   |
| Solder joints                  |       | 7/8     | 9/6  | 11/3  | 13/5  | 15/11     | 21/2  |
| Union and joints               |       | 12/10   | 16/5 | 21/1  | 28/1  | —         | —     |
| Stop valve and ditto           |       | 28/11   | 37/7 | 51/10 | 80/9  | —         | —     |
| Bib valve and ditto            |       | 20/8    | 28/- | —     | —     | —         | —     |
| Ball valve and ditto           |       | 22/6    | 31/7 | 49/5  | 71/11 | —         | —     |
| Sleeve and ditto               |       | —       | —    | —     | 21/3  | 28/9      | —     |

## COPPER TUBES

|                     | 4in   | 4in  | 4in  | 4in  | 4in   | 2in   |
|---------------------|-------|------|------|------|-------|-------|
| Tubes per foot run  | 2/6   | 3/1  | 4/1  | 4/11 | 5/10  | 8/5   |
| Couplings: straight |       |      |      |      |       |       |
| each                | 3/1   | 4/1  | 6/1  | 8/1  | 10/4  | 14/4  |
| Do. Bends each      | 6/8   | 7/11 | 11/4 | 15/3 | 23/3  | 32/3  |
| Do. Tees            | 6/11  | 8/-  | 12/7 | 17/- | 23/5  | 33/4  |
| Do. Cistern         | 4/4   | 5/10 | 7/8  | 9/9  | 13/7  | 18/1  |
| Stop cocks          | 23/10 | 33/6 | 52/9 | 93/- | 138/- | 213/- |

## BLACK TUBING (Class C.)

|                     | 4in     | 4in     | 4in    | 4in  | 4in | 2in  |
|---------------------|---------|---------|--------|------|-----|------|
| Tubes, per foot run | 1/7 1/2 | 1 11/16 | 2 4/16 | 3/-  | 3/7 | 4/9  |
| Bends and fix, each | 3/6     | 4/3     | 5/2    | 6/8  | 8/- | 11/7 |
| Tees and ditto      | 3/8     | 4/5     | 5/4    | 6/10 | 8/4 | 12/2 |
| Fire bends          | 1/2     | 1/4     | 1/5    | 1/8  | 2/3 | 4/-  |

|  | 2in  | 4in          |
|--|------|--------------|
| Coated iron (M) weight L.C.C. soil and waste fixed with nails and distance |      |              |
| pieces and molten lead joints  | 4/3  | 6/3 foot run |
| Extra only for bends and joint   | 12/7 | 20/9 each    |
| Do. junctions and joints   | 14/- | 26/- do.     |
| Do. cleaning doors   | 16/6 | 18/- do.     |
| Domical wire guards  | 2/4  | 2/6 do.      |

## PLASTERER—

|   | Yards | super. | Narrow        | Sundries                          |
|---|-------|--------|---------------|-----------------------------------|
| Lime and 1/2" Render and set  | 5/2   | —      | Increase      | Quirk 2d.                         |
| hair  | —     | —      | in cost       | —                                 |
| Do. 1/2" Do. float and set  | 6/6   | —      | up to 3"      | Arris 3d.                         |
| Sirapite 1/2" Skimming coat   | 3/6   | —      | 75%           | Fair edge 2d.                     |
| Do. 1/2" Render and set   | 6/9   | —      | Do. 3" to 6"  | Rounded edge 4d.                  |
| Do. 1/2" Do. float and set  | 8/7   | —      | 60%           | Flush 4d.                         |
| Portland 1/2" Backing coat  | 4/-   | —      | Do. 6" to 12" | bead 1/4                          |
| Do. 1/2" Plain face   | 6/9   | —      | 40%           | Mouldings per inch 4d.            |
| Do. 1/2" Screed   | 4/-   | 3/3    | —             | Metres=1ft                        |
| Do. 1/2" Screed   | 5/-   | 4/4    | —             | Joining new to old plastering 3d. |
| Keenes 1/2" Skimming coat   | 4/6   | —      | —             | —                                 |
| Plaster board and scrim   | 5/6   | —      | —             | —                                 |
| Metal lathing 1/2" 24 gauge   | 4/11  | —      | —             | —                                 |
| Dubbing up to 1/2" thick  | 1/9   | —      | —             | —                                 |
| 1/2" x 6" x 6" White or cream glazed wall tiling and setting on prepared screed | —     | —      | 35/-          | yard super.                       |
| Rounded edge to do. 3/4d. foot run; angles for same 3/4d. each.                 | —     | —      | —             | —                                 |
| Cutting and fitting tiles around pipes, clips, etc., 9d. each.                  | —     | —      | —             | —                                 |

## POLISHING

|   | Foot super | Foot run |
|---|------------|----------|
| NEW WORK—                               |            |          |
| Staining, bodying-in and French Polish  | 2/3        | 1/6      |
| Staining and wax polishing on hardwood  | 1/-        | 8d.      |
| OLD WORK—                               |            |          |
| Cleaning down old work and repolish..   | 10d.       | —        |
| Stripping, preparing and repolishing .. | 2/6        | 1/8      |

## INTERNAL PAINTING

With white lead base in common colours, with brushes.

|                     | Knot stop | Prime and paint | Prime and paint | Add for each extra coat |
|---------------------|-----------|-----------------|-----------------|-------------------------|
| ON WOOD—            | prime     | once            | twice           | 1/8 Yard super          |
| General surfaces .. | 2/4       | 4/7             | 6/4             | 1/8 Yard super          |

|                                       |        |         |        |                  |
|---------------------------------------|--------|---------|--------|------------------|
| Running lengths not exceeding 3" wide | 3/4d.  | 6/4d.   | 9d.    | 2 1/2d. Yard run |
| Do. 3" to 6" wide ..                  | 5d.    | 9/4d.   | 1/-    | 3 1/2d. do.      |
| Do. 6" to 9" wide ..                  | 7/4d.  | 1/1 1/4 | 1/7    | 5d. do.          |
| Do. 9" to 12" wide ..                 | 10/4d. | 1/6     | 2/-    | 6 1/2d. do.      |
| Sash square each side                 | 4/11   | 8/5     | 11/4   | 2 1/11 per doz.  |
| Do. in large squares                  | 7/1    | 12/-    | 16/2   | 3/10 do.         |
| Opening edges ..                      | 7d.    | 1/2     | 1/9    | 7d. each         |
| Casement frames                       | —      | —       | —      | —                |
| each side                             | 4/4d.  | 8/4d.   | 1/-    | 3d. Yard run     |
| Mullions or transoms, do.             | —      | 6/4d.   | 11/4d. | 1/3 4/4d. do.    |

## ON PLASTER—

|                   | One coat | Two coats | Three coats | Per Yard super |
|-------------------|----------|-----------|-------------|----------------|
| Paint on surfaces | 2/4      | 4/4       | 6/-         | —              |
| Do. on mouldings  | 2/8      | 5/2       | 7/-         | —              |
| Do. on enrichment | 4/6      | 8/6       | 11/-        | —              |

## ON STEEL—

|  |         |         |      |          |
|--|---------|---------|------|----------|
| Paint on structural steel ..   | 2/-     | 3/9     | 5/3  | do.      |
| Do. on roof trusses  | 3/3     | 6/4     | 8/9  | do.      |
| Do. on metal windows measured over all on both sides, divided into squares | 3/-     | 5/2     | 7/3  | do.      |
| Do. divided into large squares   | 2/7     | 4/5     | 5/9  | do.      |
| Do. divided into extra large squares                                       | 2/1     | 3/8     | 4/11 | do.      |
| Do. on opening edges   | 9/4d.   | 1/5 1/2 | 1/11 | each     |
| Do. on rain water pipe   | 7d.     | 1/3     | 1/8  | Yard run |
| Do. on gutter  | 1/-     | 2/1     | 2/10 | do.      |
| Do. on small pipe  | 2 1/4d. | 5/4d.   | 8d.  | do.      |

## GLAZING (To New Work)

Polished Plate Glass, ordinary substance (about 1/2in), glazing quality, in the following sizes, glazed complete, in quantities not exceeding 100 feet superficial—

|  | Per foot super |
|--|----------------|
| In plates not exceeding 2 feet super in each | 4/3            |
| Do. 5 feet                                   | 4/11           |
| Do. 45 feet                                  | 5/6            |
| Do. 100 feet                                 | 5/10           |

Add extra price for glazing with screw beads or clips 3d. per foot super.

Do. if glazing bedded in washleather or velvet 6d. per foot run.

## SHEET GLASS glazed, complete, per foot, super, in new work:

|   | 24 oz   | 26 oz   | 32oz    |
|---|---------|---------|---------|
| Ordinary quality clear glazed to wood, with putty in areas of 100 feet super in the aggregate—per foot super .. | 1/8     | 1/10    | 2/0 1/2 |
| Do. 200 feet do. ..   | 1/6 1/2 | 1/8 1/2 | 1/11    |
| Do. 500 feet do. ..   | 1/4     | 1/6 1/2 | 1/9 1/2 |

Sundry glass and glazing, all as last, in areas 100 feet super in the aggregate.

|                              |          |                |
|------------------------------|----------|----------------|
| Figured rolled, white        | —1/9 1/2 | per foot super |
| Do. to standard tints        | —2/6 1/2 | do.            |
| Fluted                       | 2/2      | do.            |
| Reeded (Narrow, Broad, etc.) | 2/1 1/2  | do.            |
| Reedlyte (do.)               | 2/1 1/2  | do.            |
| 1/2in Rough cast             | 1/11     | do.            |
| 1/2in Wired Rough cast       | 2/0 1/2  | do.            |
| 1/2in. Georgian do.          | 2/1      | do.            |

Add for glazing all as before but to steel to similar work as above, 2d. per foot super.

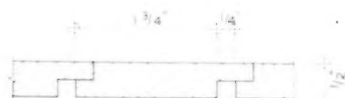
## PAINTER AND DECORATOR

DISTEMPERING—In common colours, put on with brushes—

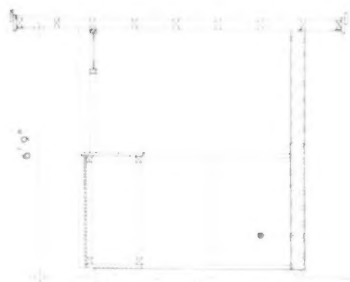
|   | 1 coat | 2 coats | Add if required for (finish) (under-sealing Stipp-coat coat ling) |
|---|--------|---------|---|
| Ordinary distemper on flat surface of plaster | 7d.    | 1/1     | 5d. 2d.   |
| Washable do. on do. of plaster                | 10d.   | 1/6     | 5d. 2d.   |
| Add if in margins, narrow widths or panels    | 30%    | 30%     | 20% 50%   |
| Add if on mouldings                           | 50%    | 50%     | 45% —   |
| Add if on enrichments                         | 160%   | 160%    | 115% —  |

## PAPERHANGING

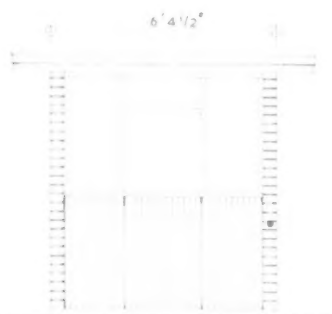
|               | Per piece— | Lining | Pattern |
|---------------|------------|--------|---------|
| Hanging only— |            |        |         |
| On walls      | —          | 4/-    | 4/10    |
| On Stairs     | —          | 5/9    | 7/2     |
| On ceilings   | —          | 5/6    | 6/2     |



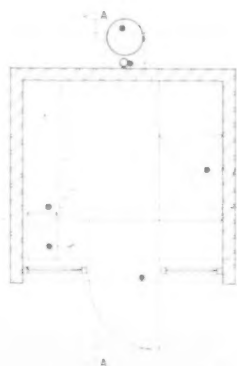
PLAN OF COUNTER SLATS



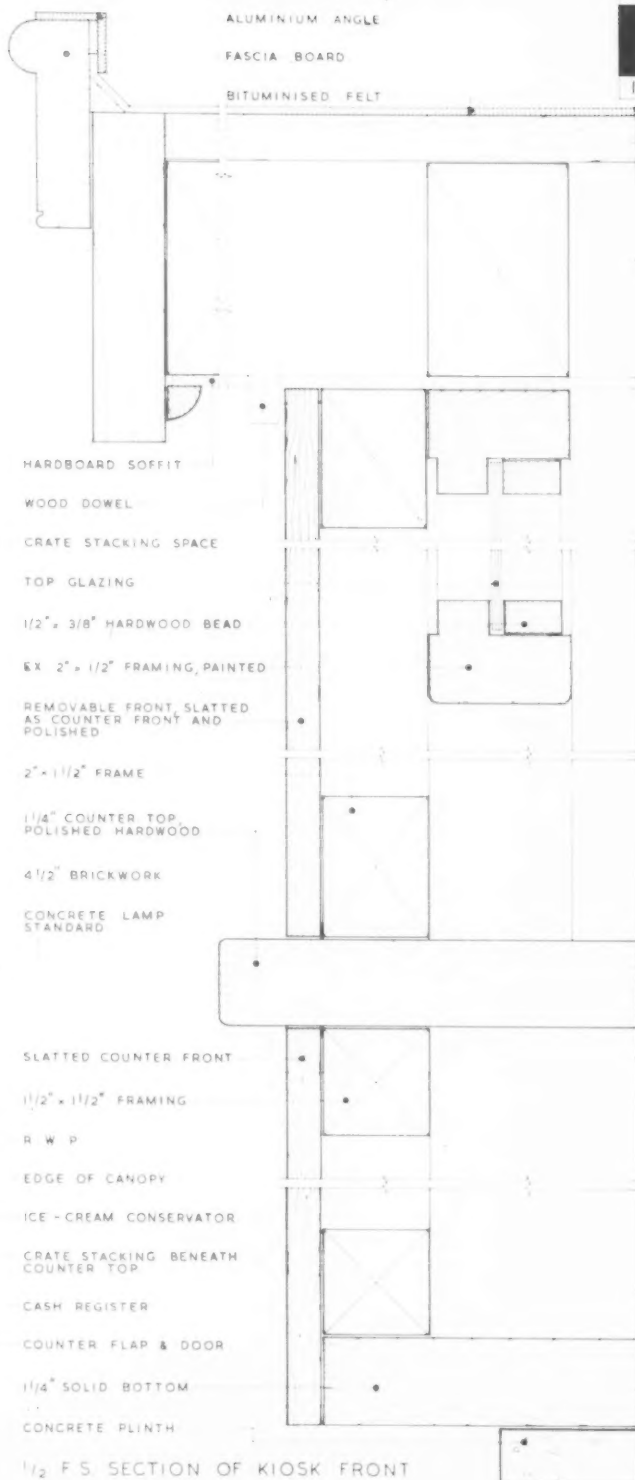
SECTION A - A



FRONT ELEVATION



PLAN SCALE 1" = 4' 0"



1/2 F.S. SECTION OF KIOSK FRONT

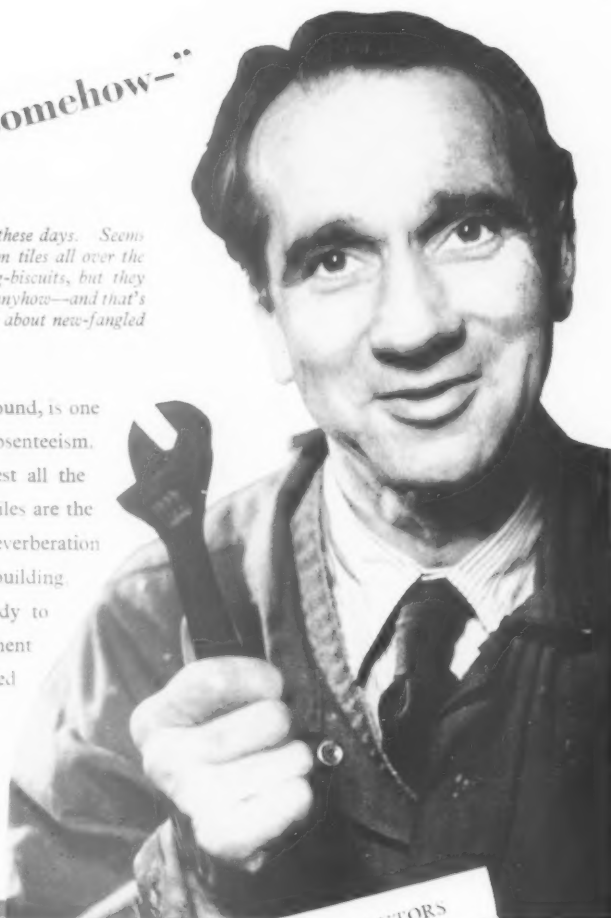


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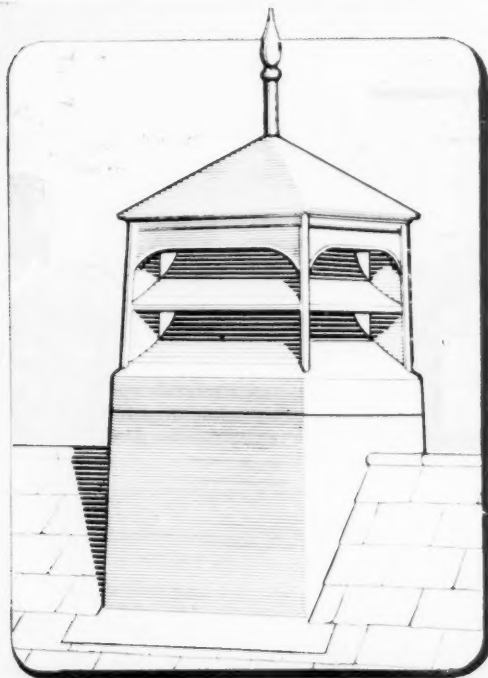
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## CONTRACT • NEWS •

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### OPEN

#### BUILDING

**ALDRIDGE U.C.** (a) 62 houses, Red-house Lane. (b) Engineer and Surveyor, Council Offices, Daw End, Rushall, Staffs. (c) 2gns. (e) July 28.

**BEVERLEY R.C.** (a) 22 houses, Swanland. (b) G. Palfreyman, 36, Market Place. (c) 1gn cheque, payable to Council. (e) July 30.

**BROMLEY B.C.** (a) 8 shops and 30 old persons' dwellings, Hayes Place Estate. (b) Borough Engineer, Municipal Offices. (c) 2gns. (d) July 30.

**BURTON-UPON-TRENT B.C.** (a) 32 flats with road works, drainage, etc., Bal-four Street and Craven Street site. (b) Borough Surveyor, Town Hall. (c) 2gns. (d) July 28. (e) Aug. 26.

**COLCHESTER B.C.** (a) 7 blocks of 12 flats each and a block of 18 flats, Shrub End site. (b) Borough Engineer, 64, West Stockwell Street. (c) 2gns. (e) July 28.

**CRICKHOWELL R.C.** (a) (1) 2 pairs of houses at Gilwern; (2) 2 pairs at Clydach; (3) 1 pair at Llangynidr; and (4) 1 pair at Cwmda. (b) Messrs. J. Merton Jones and Son, St. Mary's Chambers, Abergavenny. (c) 3gns cheque, payable to Council. (e) Aug. 16.

**DARLSTON U.C.** (a) 42 houses, 42 houses and 48 houses, Bentley Estate (as 1, 2 or 3 contracts); 10 aged persons' bungalows at Bush Street, and 6 aged persons' bungalows at Hall Street East. (b) Council's Clerk, Town Hall. (c) 2gns each contract. (d) July 19.

**DURHAM C.C.** (a) Repair of infants' school at St. Margaret's C.E. School, Durham; adaptations to provide practical rooms at Butterknowle County School; adaptations at Spennymoor Branch Library; improvements to domestic science and laundry rooms at Dinsdale Park Residential School. (b) County Architect, Court Lane. (d) July 21.

**DURHAM C.C.** (a) 3 classrooms at Billingham North County School; 1 classroom at Consett County Infants' School and adaptations to 1 classroom at Chopwell West County Infants' School. (b) County Architect, Court Lane, stating school or schools. (d) July 21.

**EAST GRINSTEAD U.C.** (a) (1) 34 houses; (2) 18 houses and (3) 8 houses, Stage II of the Blackwell Farm Estate. (b) Council's Surveyor, East Court, stating sites. (c) 5gns cheque, payable to Council. (e) Aug. 2.

**FARNHAM U.C.** (a) Up to 60 houses, Eastern Section of Weydon Lane Estate. (b) Messrs. Gilbert and Hobson, 75, Castle Street. (c) 2gns. (e) Aug. 2.

**HODDESDON U.C.** (a) Road and Sewer Works, Westfield Estate. (b) Engineer and Surveyor, Council Offices. (c) 1gns. (e) July 30. See page 29.

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**HORNCHURCH U.C.** (a) 16 shops and 16 flats, Hacton Farm Estate, with ancillary works. (b) Council's Surveyor, Council Offices. (c) 2gns. (e) Aug. 2.

**LINCOLN C.C.** (a) Timber office accommodation for the Children's Department at Beaumont Fee, Lincoln, with site works. (b) City Architect, Stamp End. (c) 2gns. (e) Aug. 1.

**LONDON—HENDON B.C.** (a) Accommodation for Civil Defence H.Q. at "Hatchcroft," The Burroughs, N.W.4. (b) Borough Engineer, Town Hall, N.W.4. (c) 2gns. (d) July 19.

**LONDON—WALTHAMSTOW B.C.** (a) 31 houses and block of 23 lock-up garages on site bounded by Handsworth Avenue, Falmouth Avenue and Gordon Avenue, Highams Park, E.4. (b) Borough Architect, Town Hall, E.17. (c) 2gns. (d) July 21. (e) Aug. 11.

**LOUTH B.C.** (a) (1) Block of 4 shops with flats above and (2) 20 houses, with paths and drainage, Eastfield Road Estate. (b) Town Clerk, Town Hall. (c) 2gns. (e) July 29.

**MANCHESTER C.C.** (a) 11 buildings over flow-control stations in Haweswater Aqueduct, Northern Section (Kendal to Wennington). (b) City Architect, Town Hall. (c) 1gn. (e) Aug. 2.

**MERTHYR TYDFIL B.C.** (a) Public conveniences near the Bush Hotel, Dowlais. (b) Borough Engineer, Town Hall. (c) 3gns. (e) July 26.

**N. IRELAND—FERMANAGH C.C.** (a) Children's home at Elliott Place, Enniskillen. (b) Messrs. McCarthy and Lilburn, Scottish Provident Buildings, Belfast. (c) 3gns. (e) Aug. 5.

**NEWCASTLE REGIONAL HOSPITAL BOARD.** (a) Alterations to theatre block at Shotley Bridge Hospital. (b) Board's Secretary, "Dunira," Osborne Road, Jesmond, 2. (d) July 31.

**NEWCASTLE REGIONAL HOSPITAL BOARD.** (a) Preliminary training school for nurses at South Shields General Hospital. (b) Board's Secretary, "Dunira," Osborne Road, Jesmond, 2. (d) July 31.

**ONGAR R.C.** (a) 18 houses, Shelley Estate. (b) Engineer and Surveyor, Bowes Field, High Street. (c) 2gns.

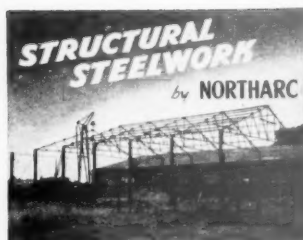
**OSWESTRY R.C.** (a) 26 houses at Porthywaen, 6 at site No. 1, Kinnerley, and 6 at site No. 2, Kinnerley, near Oswestry, with roads and sewage plants. (b) Messrs. S. T. Walker, 83, Suffolk Street, Birmingham, 1. (c) 3gns.

**RICKMANSWORTH U.C.** (a) Building works at Mill End Pumping Station for installation of new pumping machinery. (b) Engineer and Surveyor, Council Offices, High Street. (e) July 28.

**ROCHDALE B.C.** (a) 2 blocks of bungalows, comprising 11 dwellings, at Bishop Street. (b) Borough Surveyor, Town Hall. (c) 2gns. (e) July 29.

**SAFFRON WALDEN R.C.** (a) 4 bungalows at Ashdon. (b) Council's Clerk, Council Offices, Debden Road. (c) Aug. 2.

**SCOTLAND—ARDROSSAN B.C.** (a) 50 houses (3rd development) north of Stanley Road scheme. Separate trades. (b) Joint Town Clerks, Burgh Chambers, Ardrossan (immediately).



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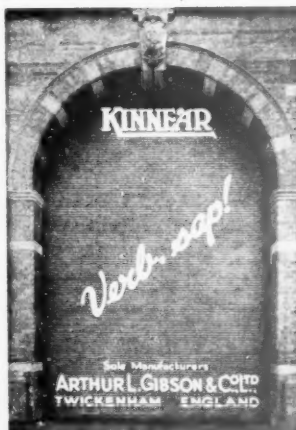
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**SCOTLAND—GLASGOW C.C.** (a) (1) 114 flats at Area O, (2) 81 at Area P, (3) 135 at Area Q, and (4) 165 at Area R, Garthamlock. (b) Director of Housing, 20, Trongate, C.1. (e) Aug. 1.

**SCOTLAND—LEVEN B.C.** (a) 16 houses in 6 blocks, with road, path and drainage, at Mountleisure site. Separate trades. (b) Messrs. A. D. Haxton and Watson, Leven. (e) July 28.

**SWANSEA B.C.** (a) Production engineering laboratory at the Technical College, Mount Pleasant. (b) Borough Architect, The Guildhall. (c) £2 payable to Corporation. (d) July 24.

**TROWBRIDGE U.C.** (a) Adaptation of large hall, Town Hall, Trowbridge, erection of external iron fire escape staircase, etc. (b) Council's Clerk, Town Hall. (c) 1gn. (e) Aug. 11.

**WARWICK R.C.** (a) 46 dwellings with paths, drains, etc., Cubbington; and 16 dwellings, etc., at Waspserton. (b) Council's Clerk, Council Offices, 23, Waterloo Place, Leamington Spa. (c) 2gns each site. (d) July 22.

**WIDNES B.C.** (a) (Group 1) 20 houses, and (Group 2) 12 houses and 4 bungalows, at Section 1B of Ditton Neighbourhood Unit. (b) Borough Architect, Brendan House, Widnes Road. (c) 5gns cheque payable to Corporation. (e) Aug. 4.

**WOLVERHAMPTON B.C.** (a) 100 dwellings. (b) Borough Engineer, Town Hall. (c) 2gns. (d) July 23.

## PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

## BUILDING

**BOOTLE B.C.** (1) Grammar-technical school. (2) Netherton. (3) Norwest Construction Co., Ltd., Ruthven Road, Waterloo, Liverpool. (4) £164,010.

**STOKE NEWINGTON B.C.** (1) 54 flats. (2) Manor Road. (3) Sir Robert McAlpine and Sons, Ltd., 80, Park Lane, W.1. (4) £97,005.

**ACCRINGTON T.C.** (1) Eight blocks of flats. (3) Geo. Wimpey and Co., Ltd., Ellesmere Port, Ches., and London, W.6. (4) £143,478.

**BOLTON T.C.** (1) Houses and maisonettes. (2) Bailey Lane. (3) Direct Labour Department. (4) £233,500.

**WEST BROMWICH B.C.** (1) 70 houses and flats. (2) Hatley Heath Estate. (3) William Kendrick and Sons, Ltd., Tasker Street, Walsall. (4) £77,459.

**SOUTHAMPTON B.C.** (1) 96 dwellings. (2) Millbrook Estate. (3) Reema Construction Co., Ltd., St. Alban Chambers, Weymouth. (4) £149,618.

**WOLVERHAMPTON B.C.** (1) 61 dwellings. (2) Trysull Road. (3) N. Hyde, 6, Claremont Road, Sedgley, Staffs. (4) £68,334.

**LONDON COUNTY COUNCIL.** (1) Erection of Elm Court primary school. (3) J. Garrett and Sons, Ltd., Cathies Road, Balham Hill, S.W.12.

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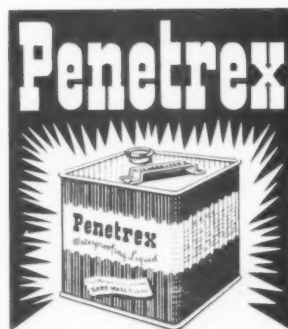
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(2) Jenkins Street School. (3) A.  
Pearce and Son, Ltd., Victoria Street,  
Birmingham, 9.**EGHAM U.D.C.** (1) 50 houses. (2)  
Thorpe Road Estate. (3) P. H. Edwards  
(Builders), Ltd., Spring Corner, High  
Street, Feltham. (4) £63,226.**WORTHING B.C.** (1) 34 flats. (2)  
Mardale Road. (3) Gorham (Contractors),  
Ltd., 4, The Crescent, Goring-on-Sea.**NANTWICH R.D.C.** (1) 48 houses. (2)  
Wistaston Green. (3) Whitchurch (Salop)  
Contractors, Castle Hill, Whitchurch,  
Salop. (4) £64,097.**DAGENHAM, ESSEX.** (1) Erection of  
Bishopwood R.C. School. (3) Pavitt Bros.,  
Ltd., Aveley, Purfleet, Essex. (4)  
£212,000.**STOKE-ON-TRENT.** (1) 100 houses.  
(2) Whitfield Estate. (3) Cornes Con-  
struction Co., Ltd., Station Road, Tun-  
stall, Staffs. (4) £153,556.**LEWISHAM B.C.** (1) Houses and flats.  
(2) Westwood Hill, etc. (3) Rush and  
Tompkins, Ltd., Station Road, Sidcup,  
Kent. (4) £176,016 and £50,698.**NORWICH CITY COUNCIL.** (1) 144  
dwellings. (2) North Park Avenue Estate.  
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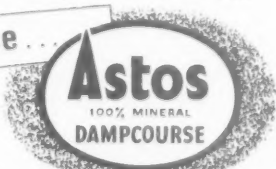
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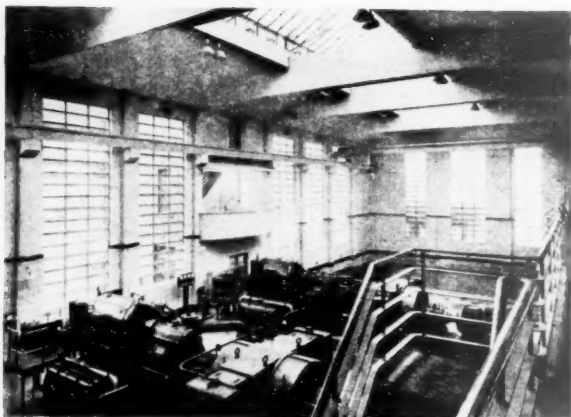
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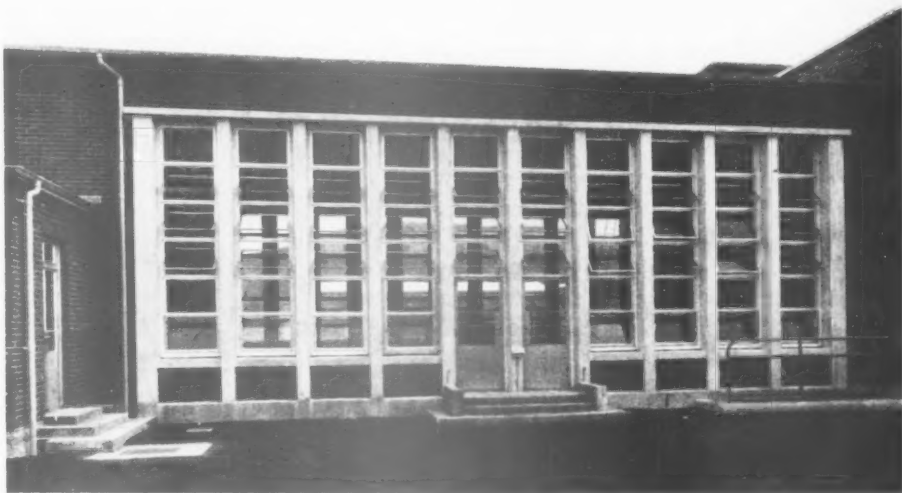
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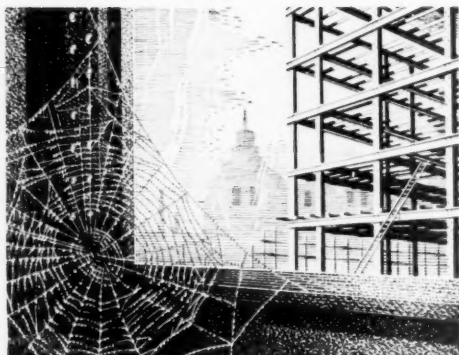
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#### COUNTY BOROUGH OF WEST HAM.

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APPLICATIONS are invited for the following posts on the permanent establishment, in connection with the reconstruction programme of the County Borough:

2 ASSISTANT ARCHITECTS, Apt. Grade VI: £645 x £20 x £20 x £25 - £710 plus London allowance.

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Application forms (returnable by 28th July, 1952) to be obtained from BOROUGH ARCHITECT AND PLANNING OFFICER, THOMAS E. NORTH, O.B.E., F.R.I.B.A., 70, West Ham Lane, E.15.

G. E. SMITH,  
Town Clerk.

West Ham Town Hall,  
STRATFORD,  
E.15.

[6514]

#### GOVERNMENT OF THE UNION OF BURMA.

APPLICATIONS are invited for the posts of (1) ARCHITECT, and (2) QUANTITY SURVEYOR for the Architectural Branch, Buildings and Roads Department. Minimum qualifications—Associatehip of the Royal Institute of British Architects for post (1) and with the Royal Institute of Chartered Surveyors qualification for post (2) or their equivalents. Pay £225 and £187 10s, fixed per mensem respectively. Contract for 3 years. Free passage. Provident Fund. Gratuity. Full terms and conditions with forms of applications obtainable on request from the Embassy of the Union of Burma, 19a, Charles Street, W.1. Applications received up to 30th August, 1952. [6520]

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Salary Scales—Lecturer, £550-£1,100. Assistant Lecturer, £450-£500, with Superannuation provision under the F.S.S.U. and a family allowance. The commencing salary on either scale will depend on the qualifications and experience of the successful candidate.

Further particulars may be obtained from the undersigned with whom applications (three copies) including the names and addresses of two referees should be lodged by 9th August, 1952.

A. W. CHAPMAN,  
Registrar.  
[6521]

#### FLINTSHIRE COUNTY COUNCIL.

APPLICATIONS are invited for the temporary appointment of ASSISTANT ARCHITECTS (two vacancies) in the County Architect's Department. Salary between £370 per annum and £710 per annum according to qualifications and experience. Applicants must be Registered Architects and preferably Associates of the Royal Institute of British Architects; have a good experience in a Local Authority Architect's Office and also have sound knowledge of the design and construction of Schools.

Applications on a form to be obtained from the undersigned, are to be returned not later than the 5th August, 1952.

W. HUGH JONES,  
Clerk of the County Council.  
County Buildings,  
MOLD. [6530]

### APPOINTMENTS—contd.

#### BOROUGH OF RAMSGATE.

##### BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

##### APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

APPLICATIONS are invited for the appointment of a SENIOR ARCHITECTURAL ASSISTANT. The appointment is subject to the Conditions of Service of the National Joint Council, the Salary being according to Grade VI (£645 rising to £710 per annum).

Applicants should be Registered Architects preferably with experience in the design of Municipal Housing Estates.

The appointment will be terminable by one month's notice on either side and will be subject to the provisions of the Local Government Superannuation Act, 1957, the successful candidate being required to pass a medical examination.

Housing accommodation will be made available if required.

Canvassing, either directly or indirectly, will disqualify and applicants must state whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

Applications, endorsed "Senior Architectural Assistant" and accompanied by not more than three recent testimonials, should be delivered to the undersigned not later than Friday the 25th July, 1952.

K. F. SPEAKMAN,  
Town Clerk.

Municipal Buildings,  
Albion Place,  
Ramsgate,  
7th July, 1952.

[6526]

#### BOROUGH OF PONTEFRAC.

##### ARCHITECTURAL ASSISTANT.

APPLICATIONS are invited for the appointment of ARCHITECTURAL ASSISTANT in the Borough Engineer's Department at a salary in accordance with Grade V of the Administrative, Professional and Technical Division of the National Scale of Salaries (£570—by two increments of £15 and one of £20 to £620 per annum).

Candidates should be suitably qualified and preference will be given to applicants having experience in the measuring up for and settlement of interim and final certificates on building contracts. The appointment will be subject to the Local Government Superannuation Act, 1957, and to the passing satisfactorily of a medical examination.

Applications stating age, qualifications and experience, together with names of two persons to whom reference can be made must be sent to reach the undersigned not later than the 28th July, 1952.

The Corporation will be prepared if necessary to assist in the provision of housing accommodation.

J. F. ROOK,  
Town Clerk.

Municipal Offices,  
Pontefract.

[6527]

#### THE UNIVERSITY OF SHEFFIELD.

##### ARCHITECTURAL DRAUGHTSMAN.

ARCHITECTURAL DRAUGHTSMAN required for the Surveyor's Office of the University. Thorough knowledge of building construction including preparation of specifications. Salary according to experience. The post is subject to the University Superannuation Scheme. Applications to the Appointments Officer, Ministry of Labour and National Service, West Street, Sheffield, 1. [6523]

#### LONDON COUNTY COUNCIL.

##### ARCHITECT'S DEPT.

ARCHITECTS, A.R.I.B.A., required for constructional divisions (Schools, Housing General). Starting salaries up to £877 10s. Applications from Architect (quote EK HSG 3), County Hall, S.E.1. (769.) [6529]

### APPOINTMENTS—contd.

#### CROWN AGENTS FOR THE COLONIES.

ARCHITECTURAL ASSISTANT required by the Government of Uganda for the Public Works Department for one tour of 30 to 36 months' continuous residential service in the first instance with prospect of permanent employment. Salary including temporary allowance £862 a year rising to £987 a year. Outfit allowance £30. Free passages and liberal leave on full salary. Provident Fund. Local Government Superannuation rights can be preserved. Candidates not over 35 years of age must be rapid and accurate Architectural Draughtsmen and have had experience in the preparation of working drawings and be capable of carrying out calculations for reinforced concrete structures. Apply at once by letter, stating age, full names in block letters, and full particulars of qualifications and experience, and mentioning this paper to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting on letter M.29370 D. The Crown Agents cannot undertake to acknowledge all applications and will communicate only with applicants selected for further consideration. [6531]

#### THE UNIVERSITY OF LIVERPOOL.

APPLICATIONS are invited for the post of LECTURER AND STUDIO INSTRUCTOR in the School of Architecture at a salary scale of £550-50-900-50-1,100.

Applications, accompanied if possible by drawings or photographs of work, two testimonials and the names of two referees, should be received not later than 1st September, 1952, by the undersigned, from whom further particulars of the conditions of appointment may be obtained.

STANLEY DUMBELL,  
Registrar. [6540]

July, 1952.

### CONTRACTS

#### HODDESDON URBAN DISTRICT COUNCIL.

##### ROAD AND SEWER WORKS, WESTFIELD ESTATE, HODDESDON.

TENDERS are invited for the CONSTRUCTION of CARRIAGEWAYS (approx. 1,100 yards super) and 9in SOIL SEWER (approx. 295 yards lineal) and other incidental works at WESTFIELD ESTATE, Hoddesdon.

Conditions of Contract may be inspected and Plans, Specification, Bill of Materials and Form of Tender obtained from the Office of the Engineer and Surveyor, Council Offices, Hoddesdon, upon payment of a deposit of £1 ls, which will be refunded upon receipt of a bona fide Tender and the return of all documents.

Tenders, in a plain sealed envelope, marked "Tender, Road and Sewer Works, Westfield Estate," must be returned to the Clerk of the Council, Council Offices, Hoddesdon, Herts, not later than 12 Noon on WEDNESDAY, 30th July, 1952. Envelopes must not bear any name or mark indicating the sender.

The Council does not bind itself to accept the lowest or any Tender.

T. J. WREN,  
Clerk of the Council.

Council Offices,  
Hoddesdon, Herts.  
30th June, 1952.

[6537]

### EDUCATIONAL

#### I.A.A.S.

##### FORTHCOMING EXAMINATIONS.

THE Incorporated Association of Architects and Surveyors will hold examinations at Intermediate and Final grades in the following sections during the week beginning 24th November, 1952:—

##### ARCHITECTURE

##### QUANTITY SURVEYORS.

##### BUILDING SURVEYORS—MUNICIPAL.

##### BUILDING SURVEYORS—NON-MUNICIPAL.

##### LAND SURVEYORS.

The Examinations will be held in London, and at certain provincial centres. Applications from candidates for permission to sit, made on the prescribed form, must be received not later than Monday, 1st September, 1952.

Full information on application to the Examinations Officer, I.A.A.S., 75, Eaton Place, S.W.1. [6456]

## AUCTION SALE

First Sale.

## COOMBE PARK STUD,

Whitchurch, Oxon.

1 mile from Pangbourne Station.  
Notice of the Important Sale of Excellent  
BUILDING MATERIALS

resulting from the Demolition of the Mansion,  
and including

A large number of Polished Mahogany and other  
panelled doors, fireplaces, paneling, door linings  
and architraves skirting, windows, glazed tiles, baths  
and lavatory basins, large quantity of timber in  
mouldings, boarding, deals and beams, electrical  
and other fittings, galvanised tanks, flagstones and  
slates, open-fronted bookcases from Adams Period  
Library, and numerous other items.

## SIMMONS &amp; SONS

have received instructions to Sell by Auction on the  
premises on

Tuesday, 29th July, 1952, and following days  
commencing daily at 11 o'clock.

Catalogues in due course from the Auctioneers,  
Hemley on Thames (Tel. 2), and at Reading and  
Basingstoke. [6524]

## MISCELLANEOUS SECTION

RATE: 1/6d. per line, minimum 3/-, average  
line 6 words. Each paragraph charged  
separately.

BOX NOS. add 2 words plus 1/- for registra-  
tion and forwarding replies.

PRESS DAY Monday. Remittances payable  
to liffe & Sons Ltd., Dorset House, Stamford  
Street, London, S.E.1.

No responsibility accepted for errors.

ARCHITECTURAL APPOINT-  
MENTS VACANT

The engagement of persons answering these ad-  
vertisements must be made through the local office  
of the Ministry of Labour and National Service etc.,  
if the applicant is a man aged 16-64 or a woman  
aged 16-59 in service, unless he or she or the em-  
ployer is exempted from the provisions of the  
Notification of Vacancies Order 1952.

TWO Junior Architectural Assistants required.  
W 1 area. Box 1400. [6515]

REQUIRED immediately in West End office.  
Architectural Assistants up to intermediate  
standard. Experience in professional office essential.  
Box 1474. [6541]

## SITUATIONS VACANT

The engagement of persons answering these ad-  
vertisements must be made through the local office  
of the Ministry of Labour and National Service etc.,  
if the applicant is a man aged 16-64 or a woman  
aged 16-59 inclusive, unless he or she or the em-  
ployer is exempted from the provisions of the  
Notification of Vacancies Order 1952.

SECRETARY required by Architect in private  
practice. Hours 9 to 5, no Saturdays. Please  
write giving details of experience and salary re-  
quired to: Leslie C. K. Watson, 6, Gray's Inn Square,  
London, W.C.1. [6533]

## SITUATIONS VACANT—contd.

EDITORIAL assistant required for "Architect  
and Building News." Applicants should be in-  
terested in the practical side of architecture and  
building, and preferably have some experience of  
site work. Salary according to age and experience.  
Box 1266. [6506]

TANGANYIKA Two assistant quantity sur-  
veyors for Dar-es-Salaam, thorough experience  
all aspects of profession essential, three-year initial  
contract with single passage paid each way; salary  
by agreement; send brief personal and professional  
details to Overseas Technical Service, 5, Welldon  
Crescent, Harrow, quoting ONS 55 1. [6525]

## SITUATIONS WANTED

ARCHITECTURAL assistant (30), M.A. school  
trained, final standard, two years' varied office  
experience, own car, requires responsible post in  
progressive London office. Box 1450. [6539]

## SERVICES OFFERED

THATCHING and reedclaying contracts under-  
taken by experts—J. G. Cowell, Soham, Ely,  
Cambs. [6122]

DESIGNING and detailing for R.C. and steel  
structures; also general building drawings by  
Regent Constructional Service, 281, Regent St.,  
London, W.1 Tel. Gro. 5175. [6440]

## FOR SALE

ALL Mouldings, Plain and Embossed, and Em-  
bossed ornaments. Numerous designs.  
Dareve's Moulding Mills, Ltd., 60, Pownall Rd.,  
Dalston, E.8. [0086]

FOR sale, 1,000,000 x 1 stock bricks, delivered  
anywhere. Leonard, Perlin, Ltd., 45, Mount  
Pleasant Road, London, N.W.10. Tel. Weller 10.  
[6522]

FOR sale, vertical double-sided A.C. photo-  
copier 2 ozalid development boxes, table type  
printing machine with D.C. lamp, all in good  
condition; suitable small D.O. Apply Lionwood, Ltd.,  
Marsh Road, Middlesbrough. [6532]

ONE 8-Drawer Plain Press, solid oak, as new,  
£18. wooden 4-drawer vene. filing cabinets,  
£6 10; 4ft 6in x 21 1/2 in office table, one large  
drawer, £1 10; 6ft 4in ply stationery cupboard,  
£6 10; office safe, fireproof, 30in x 24in x 22in, £18.  
Cole Bros., 14, London Rd., S.E.1. [6538]

TANK and steel plate fabrications of every de-  
scription up to 1/2 in thick galvanised, painted,  
self colour. Riveted or welded. Blacksmith work  
and profile cutting.—Joseph Ash & Son, Ltd., Rea  
St., South Birmingham, Tel. Midland 2441. Lon-  
don Office: W. T. Platt & Co., Grand Buildings,  
Trafalgar Sq. W.C.2. Tel. Whitehall 5782. [649]

## PLANT FOR SALE

HALDEN Duplex, vertical type, blueprint  
machine, complete with arc lamp and governor,  
table sale, suitable for small drawing office, builder's  
architect's office.—Apply Taylor, Wordsworth &  
Co., Ltd., 167, Water Lane, Leeds, 11. Tel. 32451.  
[6497]

FOR sale, approximately 20 tons R.S.J.s, quan-  
tity of 4in x 2 1/2 in M.S. angles, high quality  
industrial windows, interior and exterior doors,  
steel-framed building, all ex-Festival of Britain site.  
—Apply Craven (Builders), Ltd., 313, Saffron  
Lane, Leicester. [6502]

## PLANT FOR SALE—contd.

TURBO-GENERATING SET MERCURY ARC  
RECTIFIER.

750kW. Steam Turbo-Generating Set, by Metro-  
Vickers, complete with jet condensing plant, motor-  
driven extraction and lift pump, gauges, controls,  
valves and connecting pipework. Alternator control  
panel, oil circuit breaker, volt and ammeters,  
kW meter, kWh meter, synchroscope, etc. Output  
at the moment is 3,000-3,300 volts, 1-phase, 50  
cycles. Can be arranged for 400-1,500 if required.  
Other alternators available up to 1,500 kW.

Mercury Arc Rectifier, 35 kW, Hewlett 2 bulb,  
input 400-1,500 A.C., output 400-200 volts D.C.,  
87.5 amps, complete with all accessories and  
switches. In immaculate condition; 45hp D.C.  
motor also available. Send for list of machine  
tools, etc. Firebrands, Box 1390,  
St. Leeds (Cleckhams 1007). [6536]

## WANTED

WALL and floor tiling wanted, supply and fix or  
labour only, first-class work at competitive  
prices.—Rye Tiling Products, 140, Landcroft Rd.,  
London, S.E.22. [6485]

## ACCOMMODATION

SURVEYOR offers accommodation in Westminster  
office to architect or similar professional gentle-  
man for nominal rent. Box 1390. [6528]

PROFESSIONAL man offered use of furnished  
office, one or two days weekly, with or without  
typing and secretarial services; reasonable terms;  
evening facility.—Mayfair 4246. [6488]

TALANTON Suite of 8 rooms suitable for pro-  
fessional offices to be let on lease, £250 per  
annum, or would let in two suites of 3 and 5  
rooms.—Apply Rawlinson & Squares, Chartered  
Surveyors, Taunton, Tel. 5744. [6534]

## BUSINESS &amp; PROPERTY

BLOCK of well-built brick buildings suitable for  
storage. Floor space 5,200 ft. Slate roof and  
all services. Three miles Watford. Freehold  
possession.—Apply to owners, Woodman's, Pinner.  
Tel. Pinner 802. [6510]

## NISSEN HUTS, ETC.

## BUILDINGS.

NISSEN type, all sizes, covered new or second-  
hand, sheets, from 16ft to 9ft wide, in any  
length. Delivery ex stock.

WESCOL CONSTRUCTION CO.,  
QUEENSBURY, BRADFORD.  
Tel. Queensbury 3292. [0117]

RECONDITIONED ex-Army huts and manu-  
factured buildings, timber, asbestos, Nissen  
type, hall type, etc., all sizes and prices.—Write  
call or telephone Universal Supplies (Belvedere),  
Ltd., Dept. 32, Crabtree Manorway, Belvedere,  
Kent. Tel. Erith 2948. [0120]

STEEL-FRAMED Building, 200ft x 100ft x 18ft to  
eaves, north light type roof, in four bays 25ft x  
200ft long. Also steel-framed building 140ft x 120ft x  
14ft to eaves, ridge type roof in three bays 40ft  
wide, complete with sheeting, gutters, etc. Imme-  
diate delivery.—Burrill, 109, Pencinsey Rd., Llan-  
daff, Cardiff. Tel. Llandaff 95. [6491]

## INDEX TO ADVERTISERS

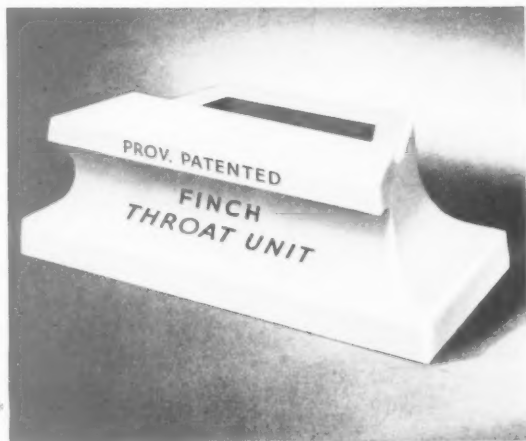
Official Notices, Tenders, Auction, Legal and Miscellaneous Appointments on pages 29 and 30

|  |    |  |        |   |    |  |    |
|--|----|--|--------|---|----|--|----|
| Anderson, D. & Sons  | 14 | Durasteel, Ltd.                          | 23     | Hope, Henry, & Sons, Ltd.                       | 17 | Ringer Building Works, Ltd.                    | 23 |
| Anglian Building Products, Ltd.  | 2  | Duro Paviers, Ltd.                       | 25     | Hyman, F.R.P.S., Edgat                          | 23 | Rubens Co., Ltd., The                          | 25 |
| Baird & Tatlock, Ltd.  | 7  | Ellis School, The                        | 21     | Industrial Engineering, Ltd.                    | 11 | Sage, Fredk., & Co., Ltd.                      | 19 |
| Bath & Portland Stone Firms,<br>Ltd.   | 28 | Engert & Rolfe, Ltd.                     | 23, 24 | Jones & Broadbent, Ltd.                         | 16 | Shapland & Pether, Ltd.                        | 28 |
| Blackwell, Wyckham   | 23 | Evans Lifts, Ltd.                        | 23     | King, J. A., Co., Ltd.                          | 26 | Southern Forge, Ltd.                           | 28 |
| British Aluminium Co., Ltd.  | 5  | Familios, T. W., Ltd.                    | 6      | Kinnear Shutters                                | 24 | Spithorne Metals, Ltd.                         | 28 |
| British Reinforced Concrete<br>Engineering Co., Ltd. The<br>Outside Back Cover | 22 | Finch, B. & Co., Ltd.                    | 6      | Land Gear Co., Ltd.                             | 23 | Spencer Lock & Co., Ltd.                       | 4  |
| Callow Rock Limestone Co., Ltd.  | 28 | Finlock Gutters, Ltd.                    | 16     | Lead Industries Development<br>Council          | 23 | Steel Bracketing & Lathing,<br>Ltd.            | 26 |
| Cape Asbestos Co., Ltd., The   | 15 | Floren Renovations, Ltd.                 | 23     | Light Steelwork (1925), Ltd.                    | 23 | Titanine, Ltd.                                 | 6  |
| Carlisle Plaster & Cement Co.,<br>Ltd.   | 22 | Freeman, Joseph, Sons & Co.,<br>Ltd.     | 14     | Latex Asbestos Flooring Co.                     | 24 | Turner, Charles, & Son, Ltd.                   | 20 |
| Carter, A.   | 23 | General Electric Co. Ltd., The           | 12     | London Brick Co., Ltd.                          | 1  | Uni-Builders                                   | 25 |
| Cellon, Ltd.   | 24 | Gibson, Arthur L., & Co., Ltd.           | 12     | Manufacturers & Distributors<br>Syndicate, Ltd. | 20 | Ward, Thomas W., Ltd.                          | 23 |
| Celotex, Ltd.  | 21 | Hangers Paints, Ltd.                     | 1      | Margolis, M.                                    | 18 | Warry Patent Building Equip-<br>ment Co., Ltd. | 25 |
| Coverite (Asphalts), Ltd.  | 25 | Harvey, G. A., & Co. (Lon-<br>don), Ltd. | 22     | Mewis, G. E., Ltd.                              | 26 | Williams, John, & Sons (Car-<br>diff), Ltd.    | 27 |
| Craibtree, J. A., & Co., Ltd.  | 10 | Heywood, H., & Co., Ltd.                 | 22     | Norhate Organisation                            | 24 | Winterburn, F. A., Ltd.                        | 27 |
|  |    | Inside Front Cover                       |        | Nuralite Sales, Ltd.                            | 8  |  |    |

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# 17% more room heat retained

by  
The Finch  
Throat Unit



***The principles embodied in the Unit are approved  
in the Ministry of Works Housing Manual***

Considerable advances have been made in the development of continuous burning fires to maintain room heat with minimum fuel consumption. Parallel with this work the Finch Organisation have made important progress in heat saving by developing their Throat Units. Recent practical tests with the Finch Throat Unit show

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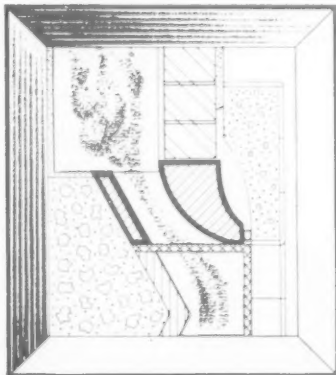
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The Finch Throat Unit is preformed. It can be built into the normal flue without necessitating any special adaptation. It obviates the use of a lintel block and in those cases where continuous burning fires are to be fitted the damage to surrounds due to excessive heat is eliminated.

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The Finch Throat Unit can be used not only in conjunction with normal open fireplaces, but for a large range of back boiler installations. No adapting is necessary. An important problem confronting many architects and builders today is the one of down-draught. This, invariably, is caused by faults in both throating and flue construction.

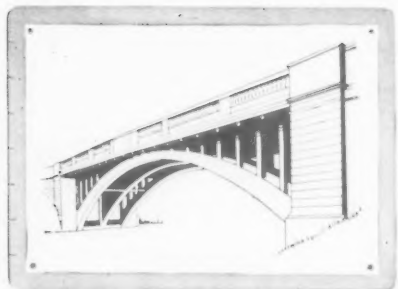
Here the Finch Organisation not only provide the unit, which in itself is a contribution to the solving of the problem, but advise generally on flue design.



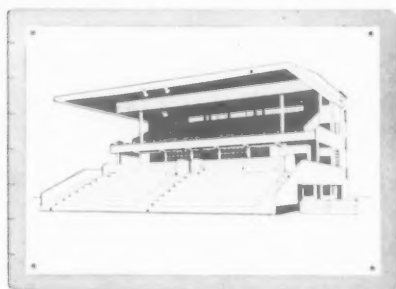
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Finch's recently built a number of experimental flues to test the Finch Throat Unit under all conditions. The results of these experiments have enabled them to produce a comprehensive work on flue design, entitled "The Finch Chimney Throat Unit". Copies available, free on request. B. Finch & Co. Ltd., Belvedere Works, Barkingside, Essex. Telephone: Valentine 8888 (30 lines).

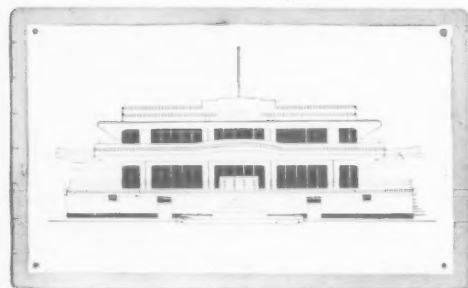




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